

# HP Officejet Pro K850 Series



## User Guide



# HP Officejet Pro K850/K850dn Color Printer

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## User Guide



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## Safety Information



Always follow basic safety precautions when using this product to reduce risk of injury from fire or electric shock.

1. Read and understand all instructions in the documentation that comes with the printer.
2. Use only a grounded electrical outlet when connecting this product to a power source. If you do not know whether the outlet is grounded, check with a qualified electrician.
3. Observe all warnings and instructions marked on the product.
4. Unplug this product from wall outlets before cleaning.
5. Do not install or use this product near water, or when you are wet.
6. Install the product securely on a stable surface.
7. Install the product in a protected location where no one can step on or trip over the line cord, and the line cord cannot be damaged.
8. If the product does not operate normally, see [Maintaining and troubleshooting](#).
9. There are no user-serviceable parts inside. Refer servicing to qualified service personnel.

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# 1 Getting started

Thank you for buying the printer. This guide provides details about how to use the printer and to resolve printer and printing problems.

## Finding other resources for the product

You can obtain product information and further troubleshooting resources that are not included in this guide from the following resources:

Resource	Description	Location
Setup poster	Provides illustrated setup information.	A printed version of this document is provided with the printer.
Getting started guide	Provides instructions for setting up the printer and information about the warranty and safety issues.	Included as a printed guide in the box with the printer. Also, an electronic version is available at <a href="http://www.hp.com/support/officejetprok850">www.hp.com/support/officejetprok850</a> .
Readme file and release notes	Provide late-breaking information and troubleshooting tips.	Included on the Starter CD.
Printer-driver onscreen Help (Windows)	Provides an explanation of the features in the printer driver.	Available from the printer driver.
Toolbox (Microsoft® Windows®)	Provides information about printhead health and access to printer maintenance services. See <a href="#">Toolbox (Windows)</a> .	Available if you choose an installation option that includes the Toolbox.
HP Printer Utility (Mac OS)	The HP Printer Utility contains tools to configure print settings, calibrate the printer, clean the printheads, print configuration and test pages, order supplies online, and find support information from the website. You can also configure settings for wireless printing. See <a href="#">HP Printer Utility (Mac OS)</a> .	The HP Printer Utility is normally installed with the printer software.
Embedded Web server (network connection)	Allows you to view status information, change settings, and manage the printer from any computer on the network. See <a href="#">Embedded Web server (EWS)</a> .	Available through any standard Web browser.
Control panel	Provides status, error, and warning information about printer operation.	See <a href="#">Printer lights reference</a> .
HP Instant Support	Helps you quickly identify, diagnose, and resolve printing problems. See <a href="#">HP Instant Support</a> .	Available through any standard Web browser or through the Toolbox (Windows), embedded Web server, or HP Printer Utility (Mac OS).
Configuration page	Provides information about the printer hardware (such as the firmware version and model number), printer settings, and accessories that are installed. If the printer is connected to a network, an additional network configuration page is available.	See <a href="#">Understanding and printing the configuration page</a> .

Resource	Description	Location
System tests and printouts (such as the print-quality analysis printout and paper-path test)	Provides information to help diagnose problems in the print mechanism and paper path.	See <a href="#">Administer the printer</a> .
HP websites	Provides the latest printer software, product, and support information.	<a href="http://www.hp.com/support/officejetprok850">www.hp.com/support/officejetprok850</a> <a href="http://www.hp.com/support">www.hp.com/support</a>
HP Total Care telephone support	Lists information to contact HP. During the warranty period, this support is often free of charge.	See <a href="#">HP Total Care phone numbers</a> .

# Accessibility

Your HP printer provides a number of features that make it accessible for people with disabilities.

## Visual

The printer software is accessible for users with visual impairments or low vision through the use of your operating system's accessibility options and features. It also supports most assistive technology such as screen readers, Braille readers, and voice-to-text applications. For users who are color blind, colored buttons and tabs used in the software and on the HP printer have simple text or icon labels that convey the appropriate action.

## Mobility

For users with mobility impairments, the printer software functions can be executed through keyboard commands. The software also supports Windows accessibility options such as StickyKeys, ToggleKeys, FilterKeys, and MouseKeys. The printer doors, buttons, paper trays, and paper guides can be operated by users with limited strength and reach.

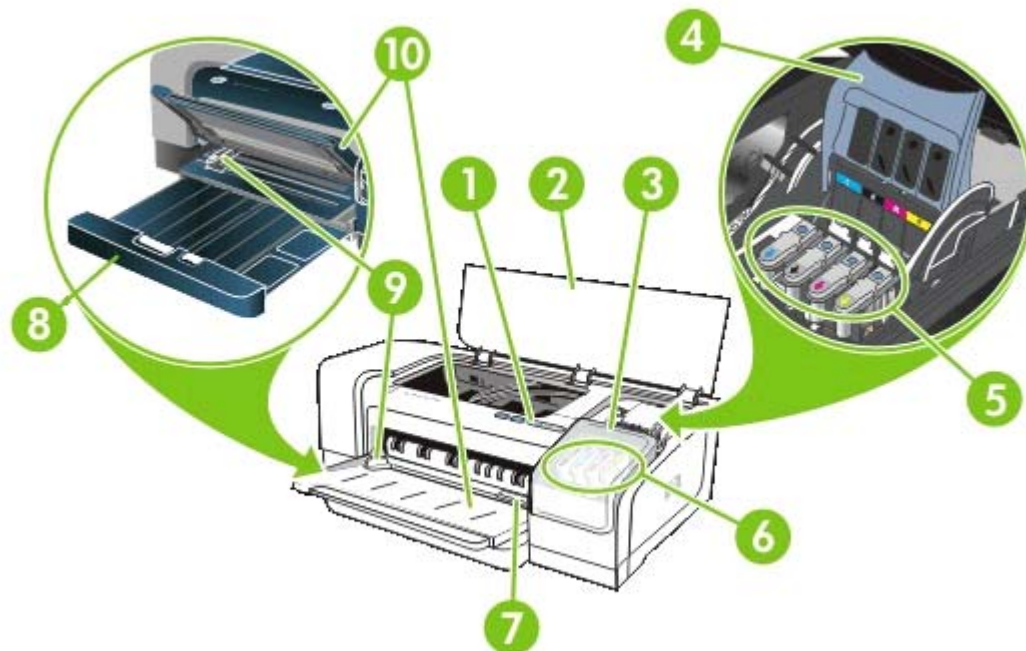
## Support

For more details about the accessibility of this product and HP's commitment to product accessibility, visit HP's Web site at <http://www.hp.com/accessibility>.

For accessibility information for Macintosh operating systems, visit the Apple web site at <http://www.apple.com/disability>.

# Understanding the printer parts

## Front view



- 1 Control panel
- 2 Top cover
- 3 Ink cartridge cover
- 4 Printhead latch
- 5 Printheads
- 6 Ink cartridges
- 7 Front manual feed slot
- 8 Input tray
- 9 Paper guides
- 10 Output tray

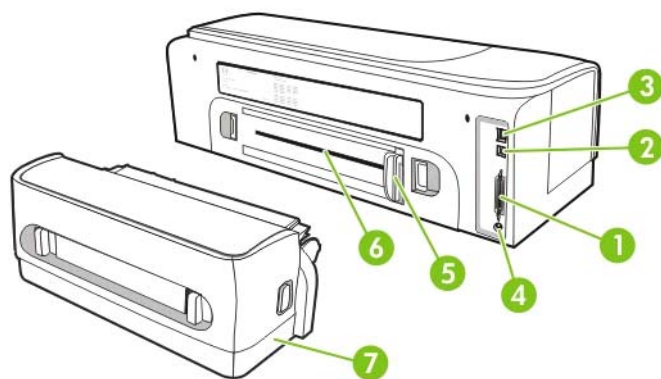
## Control panel

For more information, see [Printer lights reference](#).



- 1 (Power button and light)
- 2 (Cancel button)
- 3 (Resume button and light)
- 4 (Paper Jam light)
- 5 (Door Open light)
- 6 (Out of Paper light)
- 7 (Color indicator lights)
- 8 (Printhead light)
- 9 (Ink Cartridge light)

## Back view



- 1 Parallel (IEEE 1284) connector
- 2 USB connector
- 3 Network connector (HP Officejet Pro K850dn Color Printer only)
- 4 Power input
- 5 Paper guide

- 6      Rear manual feed slot
- 7      Automatic two-sided printing accessory (duplex unit) Included with the HP Officejet Pro K850dn Color Printer. To order separately, see [HP supplies and accessories](#) for information about ordering accessories.

## Installing other software

The following drivers and optional software are also available for installation on the printer.

- **HP Web Jetadmin:** This is a Web browser-based network printer management tool. A link to the HP Web Jetadmin website is included on the Starter CD. For more information about using this tool, see [HP Web Jetadmin software](#).
- **Linux driver:** Available at [www.hp.com/support](http://www.hp.com/support). For more information about using Linux with HP printers, see [hpinkjet.sourceforge.net](http://hpinkjet.sourceforge.net).

If you are using Windows NT 4.0, Windows 2000, or Windows XP, you must have administrator privileges to install a printer driver.



## 2 Installing accessories

See [HP supplies and accessories](#) for information about ordering accessories.

# Installing the automatic two-sided printing accessory

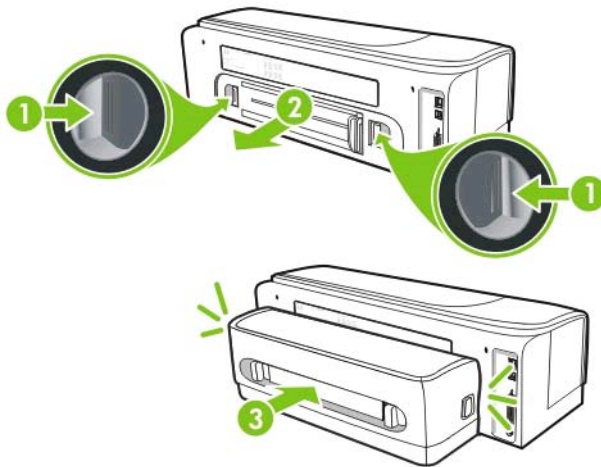
You can print on both sides of a sheet of paper automatically when the automatic two-sided printing accessory (duplex unit) is installed on the printer. The duplex unit comes with the HP Officejet Pro K850dn Color Printer. It can also be ordered separately. See [HP supplies and accessories](#). For information on using the duplex unit, see [Printing on both sides \(duplexing\)](#).

## To install the duplex unit

1. Push the buttons on both sides of the rear-access panel.
2. Remove the panel from the printer.
3. Slide the duplex unit into the printer until the unit locks into place.



**NOTE** Do not press the buttons on either side of the duplex unit when installing; use them only for removing the unit from the printer.





# Selecting print media

The printer is designed to work well with most types of office paper. It is best to test a variety of print media types before buying large quantities. Use HP media for optimum print quality. See [HP supplies and accessories](#). For more information about HP media, see [www.hp.com](http://www.hp.com).

## Tips for selecting and using print media

For the best results, observe the following guidelines.

- Always use media that conforms to the printer specifications. See [Understanding specifications for supported media](#).
- Select the appropriate media type and size from the printer driver. See [Changing print settings](#).
- Load only one type of media at a time into a tray.
- For the input tray, load media print-side down and aligned against the right and back edges of the tray. See [Loading media](#).
- Do not overload the tray. See [Understanding specifications for supported media](#).
- To prevent jams, poor print quality, and other printer problems, avoid the following media:
  - Multipart forms
  - Media that is damaged, curled, or wrinkled
  - Media with cutouts or perforations
  - Media that is heavily textured, embossed, or does not accept ink well
  - Media that is too lightweight or stretches easily
- If using recycled media, you might need to lower the ink volume in the printer software to prevent smeared ink. However, if you lower the ink volume too much, the output might appear washed out.
- If using recycled media, you might need to use another media type to prevent paper jams.

## Cards and envelopes

- Avoid envelopes that have a very slick finish, self-stick adhesives, clasps, or windows. Also avoid cards and envelopes with thick, irregular, or curled edges, or areas that are wrinkled, torn, or otherwise damaged.
- Use tightly constructed envelopes, and make sure the folds are sharply creased.
- Load envelopes into the printer according to the icon on the tray.

## Photo paper

- Use the **Best** mode to print photographs. Note that in this mode, printing takes longer and more memory is required from your computer.
- Remove each sheet as it prints and set it aside to dry. Allowing wet media to stack up might cause smearing.

## Transparencies

- Insert transparencies with the rough side down and the adhesive strip pointing towards the back of the printer.
- Use the **Best** mode to print transparencies. This mode provides longer drying time and ensures that the ink dries completely before the next page is delivered to the output tray. Allowing wet media to stack up might cause smearing.

## Custom-size media

- Use only custom-size media supported by the printer.
- If your application supports custom-size media, set the media size in the application before printing the document. If not, set the size in the printer driver. You might need to reformat existing documents to print them correctly on custom-size media.

## Understanding specifications for supported media

This section provides information regarding the sizes, types, and weights of media that the printer supports. It also provides information on the tray capacity.



**NOTE** An automatic two-sided printing accessory (duplex unit) comes with the HP Officejet Pro K850dn Color Printer.

## Supported media sizes

Media size	Input tray	Front manual feed slot	Rear manual feed slot	Auto duplex (duplex unit)	Manual duplex
<b>Standard paper sizes</b>					
U.S. Letter (215.9 by 279.4 mm; 8.5 by 11 inches)	✓	✓	✓	✓	✓
Legal (215.9 by 355.6 mm; 8.5 by 14 inches)	✓	✓	✓	✓	✓
Super B (330 by 483 mm; 13 by 19 inches)	✓	✓	✓	✓	✓
A4 (210 by 297 mm; 8.3 by 11.69 inches)	✓	✓	✓	✓	✓
Executive (184.15 by 266.7 mm; 7.25 by 10.5 inches)	✓	✓	✓	✓	✓

Media size	Input tray	Front manual feed slot	Rear manual feed slot	Auto duplex (duplex unit)	Manual duplex
Statement (140 by 216 mm; 5.5 by 8.5 inches)	✓	✓	✓		✓
A5 (148 by 210 mm; 5.83 by 8.27 inches)	✓	✓	✓		✓
A6 (105 by 148 mm; 4.13 by 5.83 inches)	✓	✓	✓		✓
B4 (257 by 364 mm; 10.1 by 14.3 inches)	✓	✓	✓	✓	✓
B5 (JIS) (182 by 257 mm; 7.2 by 10.1 inches)	✓	✓	✓	✓	✓
Tabloid (279.4 by 431.8 mm; 11 by 17 inches)	✓	✓	✓	✓	✓
A3 (297 by 420 mm; 11.7 by 16.5 inches)	✓	✓	✓	✓	✓
A3+ (330 by 483 mm; 13.0 by 19.0 inches)	✓	✓	✓	✓	✓
Banner A3 (297 by 420 mm; 11.7 by 16.5 inches)	✓	✓	✓		
Banner A4 (210 by 297 mm; 8.3 by 11.69 inches)	✓	✓	✓		
Banner Letter (215.9 by 279.4 mm; 8.5 by 11 inches)	✓	✓	✓		

Media size	Input tray	Front manual feed slot	Rear manual feed slot	Auto duplex (duplex unit)	Manual duplex
Banner Tabloid (279.4 by 431.8 mm; 11 by 17 inches)	✓	✓	✓		
Panorama A4 (210 by 594 mm; 8.27 by 23.39 inches)	✓	✓	✓		
Panorama (101.6 by 254 mm; 4 by 10 inches)	✓	✓	✓		
Panorama (101.6 by 279.4 mm; 4 by 11 inches)	✓	✓	✓		
Panorama (101.6 by 304.8 mm; 4 by 12 inches)	✓	✓	✓		
<b>Envelopes</b>					
Envelope #10 (104.9 by 241.3 mm; 4.13 by 9.5 inches)	✓	✓	✓		
Envelope Monarch (98.5 by 190.5 mm; 3.88 by 7.5 inches)	✓	✓	✓		
HP Greeting Card Envelope (111.25 by 152.4 mm; 4.38 by 6 inches)	✓		✓		
Envelope A2 (111 by 146 mm; 4.37 by 5.75 inches)	✓		✓		
Envelope DL (110 by 220 mm; 4.33 by 8.66 inches)	✓	✓	✓		

Media size	Input tray	Front manual feed slot	Rear manual feed slot	Auto duplex (duplex unit)	Manual duplex
Envelope C5 (162 by 229 mm; 6.38 by 9.02 inches)	✓	✓	✓		
Envelope C6 (114 by 162 mm; 4.49 by 6.38 inches)	✓		✓		
Envelope Kaku #2 (240 by 332 mm; 9.4 by 13.1 inches)	✓	✓	✓		
Japanese Envelope Chou #3 (120 by 235 mm; 4.7 by 9.3 inches)	✓	✓	✓		
Japanese Envelope Chou #4 (90 by 205 mm; 3.5 by 8.1 inches)	✓	✓	✓		
<b>Cards</b>					
Index card (76.2 by 127 mm; 3 by 5 inches)	✓				✓
Index card (101.6 by 152.4 mm; 4 by 6 inches)	✓		✓		✓
Index card (127 by 203.2 mm; 5 by 8 inches)	✓	✓	✓		✓
Hagaki (100 by 148 mm; 3.9 by 5.8 inches)	✓		✓		✓
Ofuku Hagaki (148 by 200 mm; 5.8 by 7.9 inches)	✓	✓	✓		
<b>Photo media</b>					
Photo L (89 by 127 mm; 3.5 by 5 inches)	✓				




Media size	Input tray	Front manual feed slot	Rear manual feed slot	Auto duplex (duplex unit)	Manual duplex
Photo L with tab (89 by 127 mm; 3.5 by 5 inches)	✓				
Photo (101.6 by 152.4 mm; 4 by 6 inches)	✓				
Photo with tab (101.6 by 152.4 mm; 4 by 6 inches)	✓				
Photo with tab (127 by 177.8 mm; 5 by 7 inches)	✓				
Photo (203.2 by 254 mm; 8 by 10 inches)	✓	✓	✓		
Photo (279.4 by 355.6 mm; 11 by 14 inches)	✓	✓	✓		
Photo (304.8 by 304.8 mm; 12 by 12 inches)	✓	✓	✓		
Photo 10 by 15 cm (100 by 150 mm; 4 by 6 inches)	✓	✓	✓		
Photo 10 by 15 cm with tab (100 by 150 mm; 4 by 6 inches)	✓	✓	✓		
<b>Other media</b>					
Custom	✓	✓	✓		✓

## Supported media types

The following table lists the types of media you can use.

Media size	Input tray and front and rear manual feed slots	Manual duplex	Auto duplex (duplex unit)
<b>Standard paper</b>			

Media size	Input tray and front and rear manual feed slots	Manual duplex	Auto duplex (duplex unit)
Plain paper	✓	✓	✓
Thick plain paper	✓	✓	
HP Bright White Paper	✓	✓	✓
HP Premium Paper	✓		
HP Premium Presentation Paper	✓	✓	✓
HP Photo and Project Paper	✓	✓	✓
Other inkjet papers	✓	✓	✓
<b>Photo papers</b>			
 <b>NOTE</b> Photo media supports up to 4800 x 1200 optimized dpi for color printing and 1200 input dpi. This setting might temporarily use a large amount of hard disk space (400 MB or more) and will result in slower printing.			
HP Photo Paper	✓		
Other photo papers	✓		
<b>Transparencies</b>			
HP transparencies	✓		
Other transparency films	✓		
<b>Specialty papers</b>			
HP Banner Paper	✓		
HP iron-on transfers	✓		
HP labels	✓		
HP note cards	✓	✓	✓
HP holiday photo cards	✓		
Other specialty papers	✓	✓	
<b>Greeting cards</b>			

Media size	Input tray and front and rear manual feed slots	Manual duplex	Auto duplex (duplex unit)
HP greeting cards	✓	✓	
HP photo greeting cards	✓	✓	
Other greeting cards	✓	✓	
<b>Brochure papers</b>			
HP brochure papers	✓	✓	✓
Other brochure papers	✓	✓	✓

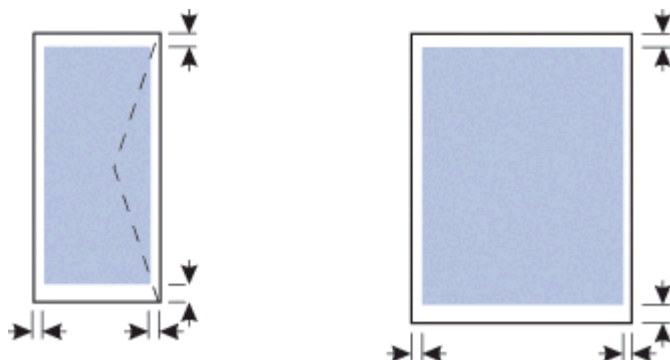
## Supported media weights and capacities

Tray	Type	Weight	Capacity
Input tray	Paper	60 to 135 g/m <sup>2</sup> (16 to 36 lb bond)	Up to 19 mm (0.75 inches) or up to 150 sheets plain paper
	Envelopes		Up to 15
	Cards		Up to 30
	Transparencies or labels		Up to 30
Front manual feed slot	Paper	65 to 135 g/m <sup>2</sup> (17 to 36 lb bond)	Up to 10 sheets
	Envelopes		Up to 5
	Cards		Up to 5
	Transparencies or labels		Up to 8
Rear manual feed slot	Paper, envelopes, cards	Up to 280 g/m <sup>2</sup> (74 lb bond)	One at a time; thick media (up to 0.3 mm)
	Transparencies or labels		One at a time
Duplex unit	Paper (Does not support banners, index cards, or envelopes)	Up to 135 g/m <sup>2</sup> (36 lb bond)	
Output tray	All supported media		Up to 100 sheets

Tray	Type	Weight	Capacity
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## Setting minimum margins

The document margins must match (or exceed) these minimum margin settings in portrait orientation.



Media	Left and right margins	Top margin	Bottom margin
A3, A3+, B5, Legal, Super B, Tabloid	5.1 mm (0.2 inch)	3.0 mm (0.12 inch)	11.7 mm (0.46 inch)
A4, A5, A6, B4, Letter, Executive, Statement	3.3 mm (0.13 inch)	3.0 mm (0.12 inch)	11.7 mm (0.46 inch)
Cards	3.2 mm (0.13 inch)	3.0 mm (0.12 inch)	11.7 mm (0.46 inch)
Envelopes	3.2 mm (0.13 inch)	11.7 mm (0.46 inch)	11.7 mm (0.46 inch)
Photo 127 by 177.8 mm (5 by 7 inches); 203.2 by 254 mm (8 by 10 inches)	3.2 mm (0.13 inch)	3.1 mm (0.12 inch)	11.7 mm (0.46 inch)
Photo L; 101.6 by 152.4 mm (4 by 6 inches); 10 by 15 cm (3.9 by 5.9 inches)	3.1 mm (0.12 inch)	3.1 mm (0.12 inch)	11.7 mm (0.46 inch)
Photo with tab: L; 101.6 by 152.4 mm (4 by 6 inches); 10 by 15 cm (3.9 by 5.9 inches)	3.1 mm (0.12 inch)	3.1 mm (0.12 inch)	3.1 mm (0.12 inch)
Photo 10 by 15 cm (3.9 by 5.9 inches)	5.0 mm (0.2 inch)	3.1 mm (0.12 inch)	11.7 mm (0.46 inch)

# Loading media

This section explains how to load plain paper and standard media sizes and types into the input tray. Following are general guidelines for loading media into the tray:

- If you are printing on thick paper (such as cardstock), you can use the rear manual feed slot. See [Printing with the front or rear manual feed slot](#).
- If you are printing cards or envelopes, see [Printing on special and custom-size media](#).
- If you are printing one or just a few envelopes or sheets of paper, you can use the front manual feed slot and leave your regular media in the input tray. See [Printing with the front or rear manual feed slot](#).

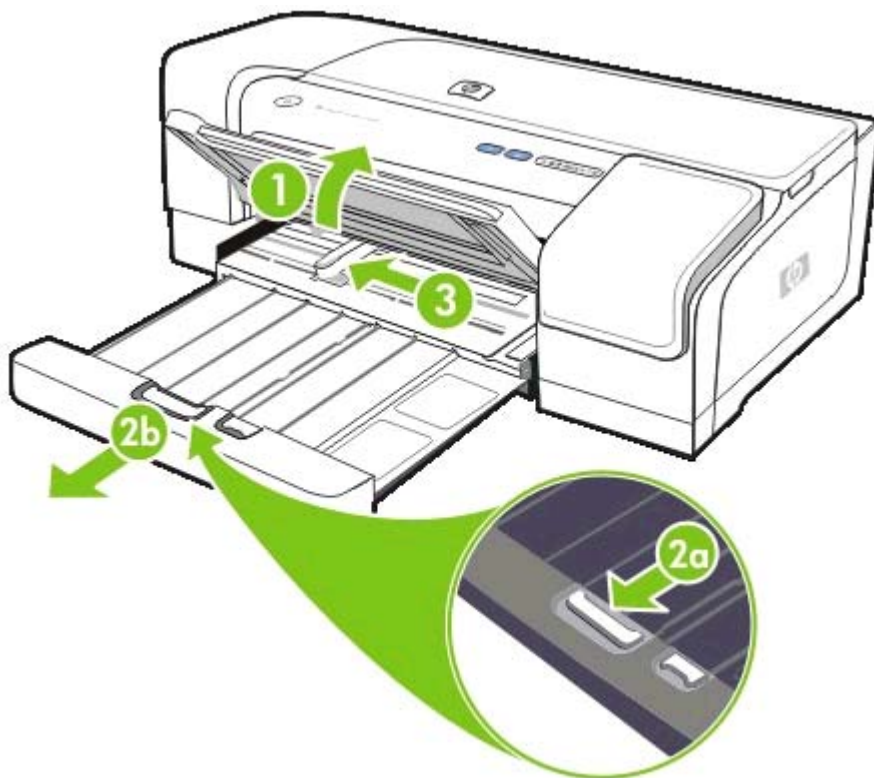
## To load media in the input tray

1. Raise the output tray. If the output tray is extended, close the tray.
2. Press the input tray lock and extend the input tray.



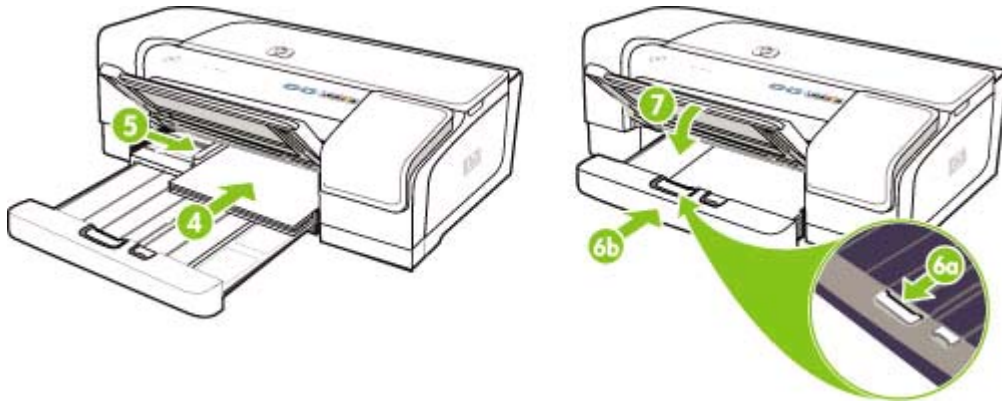
**NOTE** If the small media guide is in its open position, close it by moving it 90° counterclockwise.

3. Press the button on top of the paper guide and slide the guide to the left to its outermost position.



4. Insert a stack of media that does not exceed the height of the paper guide, print-side down along the right side of the input tray until it stops.

5. Press the button on top of the paper guide and slide the guide to the right until it stops at the edge of the media.



6. Press the input tray lock and retract the tray until it stops at the edge of the media.



**NOTE** When 215.9 x 279.4 mm (8.5 x 11 inch) paper is loaded in the input tray, the tray extension will close to the edge of the paper and leave a slight gap between the extension and the tray. The tray extends further to accommodate larger-sized media.

7. Lower the output tray.
8. Extend the output tray if necessary.

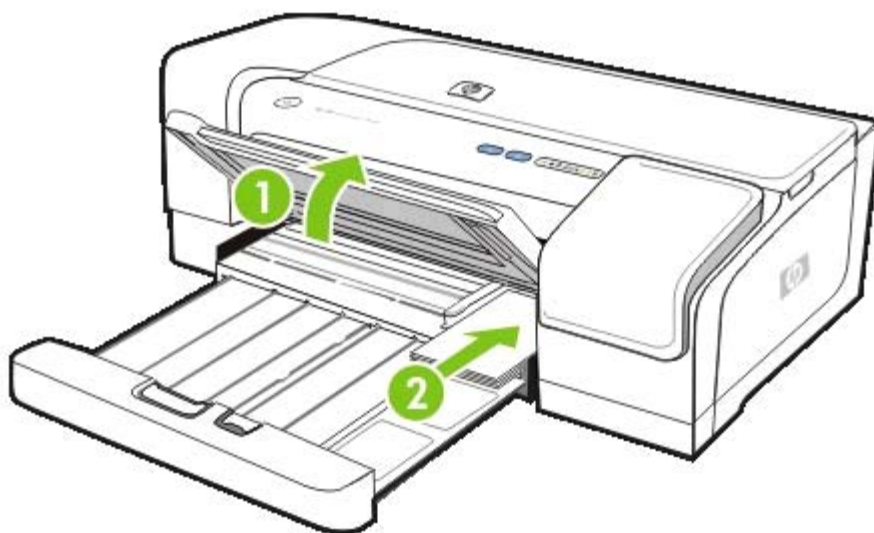
# Loading small media

## To load small media in the input tray



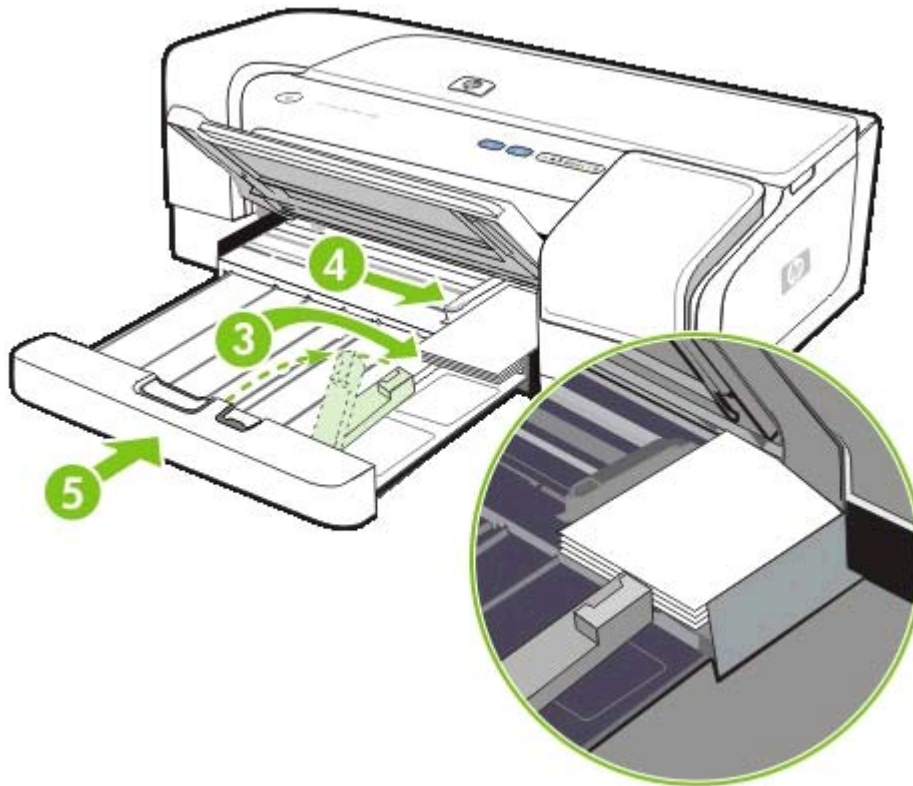
**NOTE** You can also use the front manual feed slot. If you are printing on thick paper (such as cardstock), you can use the rear manual feed slot. See [Printing with the front or rear manual feed slot](#).

1. Raise the output tray and remove any media from the input tray.
2. Insert a stack of media that does not exceed the height of the paper guide, print-side down along the right side of the input tray until it stops.



3. Open the small media guide by moving it 90 degrees clockwise from start to end position.
4. Press the button on top of the paper guide and slide the guide to the right until it stops at the edge of the media.

5. Press the input tray lock and slide the tray in until the small media guide stops at the edge of the media. As you slide the tray, the small media guide extends until it touches the edge of the media.



6. Lower the output tray.
7. When printing, select the appropriate media type and size from the printer driver. See [Changing print settings](#).



# Changing print settings

You can change print settings (such as media size or type) from an application or the printer driver. Changes made from an application take precedence over changes made from the printer driver. However, after the application is closed, the settings return to the defaults configured in the printer driver.



**NOTE** To set print settings for all print jobs, make the changes in the printer driver. For more information about printer driver features in Windows, see the printer driver online help. For more information about printing from a specific application, see the documentation for that application.

## To change settings from an application for current jobs (Windows)

1. Open the document you want to print.
2. On the **File** menu, click **Print**, and then click **Setup** or **Properties**. (Specific options may vary depending on the application you are using.)
3. Change any other desired settings and click **OK**, **Print**, or a similar command.

## To change default settings for all future jobs (Windows)

1. From the Windows desktop, click **Start**, point to **Settings**, and then click **Printers**. Or, click **Start**, click **Control Panel**, and then click **Printers and Faxes** or **Printers** (depending on the operating system).
2. Right-click the printer icon, and then choose **Properties**, **Document Defaults**, or **Printing Preferences**.
3. Change any other desired settings and click **OK**.

## To change settings (Mac OS)

1. On the **File** menu, click **Page Setup**.
2. Change any desired settings and click **OK**.
3. On the **File** menu, click **Print**.
4. Change any desired settings and click **Print**.

## Canceling a print job

You can cancel a print job using one of the following methods:

### ▲ Control panel

Press **⌘** (Cancel button). This will clear the job that the printer is currently processing. It does not affect jobs waiting to be processed.

### ▲ Windows

Double-click the printer icon that appears in the lower right corner of the computer screen. Select the print job, and then press the **Delete** key on the keyboard.

### ▲ Mac OS X

Click the **Print Center** or **Printer Setup Utility** icon, and then double-click the printer icon. Select the print job and click **Delete**.

# Printing with the front or rear manual feed slot

If you are printing one or just a few photos, envelopes, or sheets of paper, you can use the front manual feed slot and leave your regular media in the input tray.

The rear manual feed slot uses a straight paper path and is designed for printing single sheets of thick paper (up to 280 g/m<sup>2</sup>) such as cardstock.

For information on media types and sizes supported by the manual feed slots, see [Understanding specifications for supported media](#).

Printing from the manual feed slots is performed in two stages: 1) changing the software settings, and 2) loading the media. The following sections contain procedures for performing each stage.



**NOTE** If the duplex unit is installed and you want to print using the rear manual feed slot, replace the duplex unit with the rear-access panel.

## Changing the software settings

### Windows

1. Open the printer driver.
2. Click the **Paper/Quality** tab.
3. Select the manual feed option from the **Source is** drop-down list.
4. Change any other desired settings, and then click **OK**.
5. Print your document.

### Mac OS

1. Click **File**, and then click **Page Setup**.
2. Select the media size, and then click **OK**.
3. Click **File**, and then click **Print**.
4. Open the **Paper Type/Quality** panel.
5. In the **Paper** panel, select the source.
6. Change any other desired settings, and then click **Print**.

## Loading the front manual feed slot

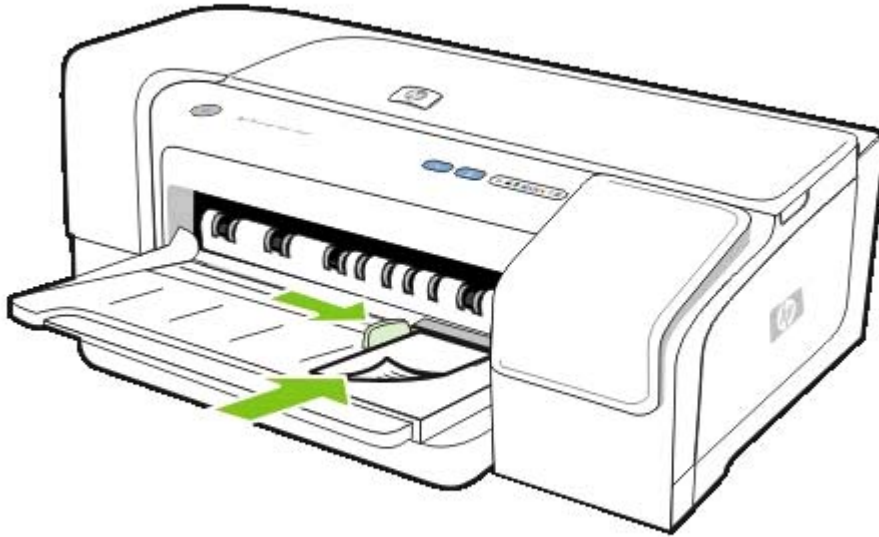


**NOTE** If there are any printouts on the output tray, remove them before using the front manual feed slot.

1. Extend the output tray.
2. Slide the paper guide to the left to its outermost position.
3. Lift the clear plastic flap and insert the media into the narrow opening between the output tray and the plastic flap. Insert up to 10 sheets of paper or 5 cards or envelopes, print-side down into

the right side of the slot until the media stops. Insert envelopes with the flaps facing up and to the right.

4. Slide the paper guide to the right until it stops at the edge of the paper.



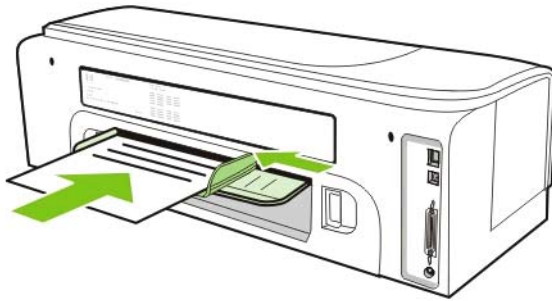
5. Press  (Resume button) to proceed with printing.



To resume printing from the input tray, remove the paper from the front manual feed slot.

## Loading the rear manual feed slot

1. If the duplex unit is installed, replace it with the rear-access panel.

2. Slide the paper guide to the required media width.



3. Insert a sheet of media print-side up into the left side of the slot until the printer grips the media.
4. Press  (Resume button) to print.
5. If you are printing more than one page, press  (Resume button) to print after inserting each sheet.

# Printing on both sides (duplexing)

You can print on both sides of a sheet of media, either automatically by using the duplex unit or manually by turning the media over and feeding it into the printer again.

## Guidelines for duplexing

- Always use media that conforms to the printer specifications. See [Understanding specifications for supported media](#).
- Specify duplex options in your application or in the printer driver.
- Do not print on both sides of transparencies, envelopes, photo paper, or glossy media. Jams might occur with these media types.
- Do not print on both sides of paper lighter than 16 lb bond (60 g/m<sup>2</sup>) or heavier than 36 lb bond (135 g/m<sup>2</sup>). Jams might occur with these media types.
- Several kinds of media require a specific orientation when you print on both sides of a page, such as letterhead, preprinted paper, paper with watermarks, and paper with prepunched holes. When you print from a computer running Windows, the printer prints the first side of the media first. When you print from a computer using the Mac OS, the printer prints the second side first. Load the media with the front side facing down.
- When printing finishes on one side of the media, the printer holds the media and pauses while the ink dries. Once the ink dries, the media is pulled back into the printer and the second side is printed. When printing is complete, the media is dropped onto the output tray. Do not grab it before printing is complete.
- You can print on both sides of supported custom-size media by using the printer's manual duplex capabilities. For a list of supported custom sizes, see [Understanding specifications for supported media](#).

## Duplexing (Windows)



**NOTE** For automatic duplexing, ensure the duplex unit is properly installed. If the rear-access panel is installed, the printer will print on one side (simplex).

### To perform duplexing in Windows

1. Load the appropriate media. See [Guidelines for duplexing](#) and [Loading media](#).
2. With a document open, on the **File** menu, click **Print**, and then choose **Properties**, **Document Defaults**, or **Printing Preferences**.
3. Click the **Finishing** tab.
4. Select the **Print on Both Sides** check box.
5. For automatic duplexing, ensure that **Use auto-duplex unit** is selected. For manual duplexing, ensure the option is cleared. See [Guidelines for duplexing](#).
6. To automatically resize each page to match the document's onscreen layout, ensure **Preserve Layout** is selected. Clearing this option may result in unwanted page breaks.

7. Select or clear the **Flip Pages Up** check box depending on which way you want the binding. See the graphics in the printer driver for examples.
8. Choose a booklet layout from the **Booklet Layouts** drop-down list, if desired.
9. Change any other desired settings, and then click **OK**.
- 10 Print your document.



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**NOTE** If you are using a computer running Windows NT 4.0, click **Continue** in the dialog box that appears to print the document. Otherwise, the printer does not start printing.

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- 11 For manual duplexing, after the first side of the document is printed, follow the onscreen instructions and reload the paper into the tray (blank-side down) or the front manual feed (blank-side up) to complete printing.

## Duplexing (Mac OS)



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**NOTE** For automatic duplexing, ensure the duplex unit is properly installed. If the rear-access panel is installed, the printer will print on one side (simplex).

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### To perform automatic duplexing in Mac OS

1. Load the appropriate media. See [Guidelines for duplexing](#) and [Loading media](#).
2. On the **File** menu, click **Print**.
3. Open the **Layout** panel.
4. Select the option to print on both sides.
5. Select the desired binding orientation by clicking the appropriate icon.
6. Change any other desired settings, and then click **OK** or **Print**.

# Printing on special and custom-size media

This section provides information on how to print on media such as envelopes, photo paper, postcards, and transparencies, as well as custom-size media.

## To print on special and custom-size media (Windows)

1. Load the appropriate media. See [Loading media](#).
2. With a document open, on the **File** menu, click **Print**, and then click **Setup** or **Properties**.
3. Click the **Paper/Quality** tab.
4. Select the media type from the **Type is** drop-down list.
5. Select the media size from the **Size is** drop-down list.

-Or-

Click **Custom**, enter the dimensions of the media, and then click **OK**.

6. Change any other desired settings, and then click **OK**.
7. Print your document.

## To print on special and custom-size media (Mac OS)

1. Load the appropriate media. See [Loading media](#).
2. On the **File** menu, click **Page Setup**.
3. Select the media size.
4. To set a custom media size, complete the following steps:
  - a. Click **Custom Paper Size** in the **Settings** pull-down menu.
  - b. Click **New**, and then type a name for the size in the **Paper Size Name** box.
  - c. In the **Width** and **Height** boxes, type the dimensions and set the margins.
  - d. Click **Done** or **OK**, and then click **Save**.
5. On the **File** menu, click **Page Setup**, and then select the new custom size.
6. Click **OK**.
7. On the **File** menu, click **Print**.
8. Open the **Color** panel.
9. Click the **Paper** tab, and then select the media type.
10. Change any other desired settings, and then click **Print**.



## 4 Configuring and managing the printer

This section provides information on managing the printer, configuring the printer in Windows or the Mac OS, and using the configuration page.

# Managing the printer

## Overview of printer management tasks

The following table lists the printer tools that can be used to manage the printer.

For more information about the administrator tools listed in the table, see [Overview of printer management tools](#).



**NOTE** Windows users can use the printer driver, Toolbox, EWS, control panel, HP Web Jetadmin, and myPrintMileage. Mac OS users can use the printer driver, HP Printer Utility, EWS, and control panel.

For information about the HP Web Jetadmin software, open the HP Web Jetadmin software and see its documentation. For more information about myPrintMileage, go to the MyPrintMileage website and follow the onscreen instructions.

Task	Tools						
	Printer driver	<a href="#">Toolbox (Windows)</a>	<a href="#">HP Printer Utility (Mac OS)</a>	<a href="#">Embedded Web server (EWS)</a>	<a href="#">Printer lights reference</a>	<a href="#">HP Web Jetadmin software</a>	<a href="#">myPrintMileage</a>
<a href="#">Monitor the printer.</a>							
Operation and status		✓		✓	✓	✓	
Media and supplies		✓	✓	✓	✓	✓	✓
Jobs and printer usage				✓			
<a href="#">Administer the printer</a>							
Printer security				✓		✓	
Configure job-accounting options				✓			
Set language				✓			
Set up alerts and notifications						✓	✓
Upgrade firmware on the printer			✓			✓	
Perform printer maintenance tasks	✓	✓	✓	✓	✓		

Task	Tools
<a href="#">Configure network options</a>	
Configure network parameters	✓ ✓

## Monitor the printer



**NOTE** For information about opening and using specific management tools, see [Overview of printer management tools](#).

Tool	Information
Toolbox (Windows)	<p><b>Operation and status</b></p> <ul style="list-style-type: none"> <li>▲ Click the <b>Printer Status</b> tab.</li> </ul> <p><b>Media and supplies</b></p> <ul style="list-style-type: none"> <li>▲ <i>Ink cartridge status:</i> The ink-level information appears on the <b>Printer Status</b> tab. Click <b>Cartridge Information</b> for information about replacement ink cartridges and expiration dates.</li> </ul>
HP Printer Utility (Mac OS)	<p><b>Media and supplies</b></p> <ul style="list-style-type: none"> <li>▲ Open <b>Information And Support</b>, and then click <b>Supplies Status</b>.</li> </ul>
Embedded Web server (EWS)	<p><b>Operation and status</b></p> <ul style="list-style-type: none"> <li>▲ <i>Printer status information:</i> Click the <b>Information</b> tab, and then click an option available on the left pane.</li> </ul> <p><b>Media and supplies</b></p> <ul style="list-style-type: none"> <li>▲ <i>Ink cartridge and printhead status:</i> Click the <b>Information</b> tab, and then click <b>Ink Supplies</b> in the left pane.</li> </ul> <p><b>Jobs and printer usage</b></p> <ul style="list-style-type: none"> <li>● <i>Accumulated ink and media usage:</i> Click the <b>Information</b> tab, and then click <b>Usage</b> in the left pane.</li> <li>● <i>Job accounting:</i> Click the <b>Settings</b> tab, and then click <b>Job Accounting</b> in the left pane.</li> </ul>
Control panel	<p>Status of jobs that are being processed, the operating status of the printer, and the status of ink cartridges and printheads.</p> <p>For more information, see <a href="#">Understanding and printing the configuration page</a>.</p>

Tool	Information
HP Web Jetadmin software	Supplies operation status and media and supplies information. See <a href="#">HP Web Jetadmin software</a> .
myPrintMileage	Supplies media and supplies information. See <a href="#">myPrintMileage</a> .



## Administer the printer

This section contains information about administering the printer and modifying printer settings.



**NOTE** For information about opening and using specific management tools, see [Overview of printer management tools](#).

Tool	Task
Printer driver	<b>Perform printer maintenance tasks</b> <ul style="list-style-type: none"> <li>• <i>Align printheads</i>: Click the <b>Services</b> tab, click <b>Service this device</b>, and then follow the onscreen instructions.</li> <li>• <i>Clean printheads</i>: Click the <b>Services</b> tab, click <b>Service this device</b>, and then follow the onscreen instructions.</li> </ul>
Toolbox (Windows)	<b>Perform printer maintenance tasks</b> <ul style="list-style-type: none"> <li>• <i>Align printheads</i>: Click the <b>Printer Services</b> tab, click <b>Align Printheads</b>, and then follow the onscreen instructions.</li> <li>• <i>Clean printheads</i>: Click the <b>Printer Services</b> tab, click <b>Clean Printheads</b>, and then follow the onscreen instructions.</li> </ul>
HP Printer Utility (Mac OS)	<b>Perform printer maintenance tasks</b> <ul style="list-style-type: none"> <li>• <i>Align printheads</i>: Open <b>Information And Support</b>, click <b>Align</b>, and then follow the onscreen instructions.</li> <li>• <i>Clean printheads</i>: Open <b>Information And Support</b>, click <b>Clean</b>, and then follow the onscreen instructions.</li> </ul>
Embedded Web server (EWS)	<b>Printer security</b> <ul style="list-style-type: none"> <li>▲ <i>Modify the administrator password</i>: Click the <b>Settings</b> tab, and then click <b>Security</b> in the left pane.</li> </ul> <b>Set language</b> <ul style="list-style-type: none"> <li>▲ <i>Set the language in EWS</i>: Click the <b>Information</b> tab, and then click <b>Language</b> in the left pane.</li> </ul> <b>Perform printer maintenance tasks</b> <ul style="list-style-type: none"> <li>• <i>Align printheads</i>: Click the <b>Settings</b> tab, click <b>Maintenance</b> in the left pane, and then in the <b>Printhead</b> section click <b>Align printheads</b> in the drop-down list.</li> <li>• <i>Clean printheads</i>: Click the <b>Settings</b> tab, click <b>Maintenance</b> in the left pane, and then in the <b>Printhead</b></li> </ul>


Tool	Task
	section click the appropriate cleaning level in the drop-down list.
Control panel	<b>Perform printer maintenance tasks</b> <ul style="list-style-type: none"> <li>• <i>Align printheads:</i> Hold down  (Power button), and then press  (Resume button) two times.</li> <li>• <i>Clean printheads:</i> See <a href="#">To clean printheads automatically</a>.</li> </ul> <p>For more information, see <a href="#">Printer lights reference</a>.</p>
HP Web Jetadmin software/alerts	Supplies security information and set up alerts and notifications. See <a href="#">HP Web Jetadmin software</a> .
myPrintMileage	Supplies set up alerts and notifications. See <a href="#">myPrintMileage</a> .

## Configure network options

This section contains information about configuring the printer's network settings.

For information about opening and using specific management tools, see [Overview of printer management tools](#). For a list of current settings, print a configuration page. See [Understanding and printing the configuration page](#).

By factory default, all supported network protocols are turned on. However, turning off unused protocols can provide such benefits as decreasing network traffic that the printer generates and preventing unauthorized users from printing to the printer.

Tool	Task
Embedded Web server (EWS)	<b>Configure network parameters</b> <ul style="list-style-type: none"> <li>▲ <i>Set a static IP address:</i> Click the <b>Networking</b> tab, select <b>Manual IP</b> from the <b>IP Address Configuration</b> option, enter the static IP address in the <b>Manual IP Address</b> box, enter the Manual Subnet Mask and Manual Default Gateway, if needed, and then click <b>Apply</b>.</li> </ul> <div>  <p><b>NOTE</b> It is not recommended that you assign a static IP address to the printer. However, a static IP address might resolve certain setup and printing problems, such as a conflict with a personal firewall.</p> </div>
HP Web Jetadmin software	Supplies information about configuring network parameters. See <a href="#">HP Web Jetadmin software</a> .

# Overview of printer management tools

## Toolbox (Windows)

The Toolbox provides status and maintenance information about the printer. It also provides links to this guide for help in performing basic printing tasks and solving problems.



**NOTE** If the Toolbox was not installed with the other printer software components, you can install it using the installation program on the Starter CD.

To monitor a printer on a shared port (for example, \\portname\printername) from a client machine, the Toolbox must be running on the server machine as well as on the client machine.

### To open the Toolbox

1. From the **Start** menu at your computer, point to **Programs**.
2. Point to **HP**, point to the printer name, and then click the **Toolbox** icon.

The Toolbox contains tabs that you can use to view product information.

For more detailed information about the options on these tabs, right-click each option in the Toolbox window.

### Printer Status tab

- **Selected printers:** Displays a list of installed printers that are supported by the Toolbox.
- **Ink Level Information:** Shows estimated ink levels for each cartridge.
- **Order Supplies:** Provides access to a website where you can order printing supplies for the printer online.
- **Cartridge Information:** Shows order numbers and expiration dates for the installed ink cartridges.
- **Preferences:** Gives you the ability to set advanced Toolbox settings, such as selecting which printer error messages appear, specifying whether you want to be notified by an audio alert when an error occurs, as well as the types of error messages that you want to see.

### Information tab

- **Printer Information:** Provides links to myPrintMileage and shows the printer hardware and printhead health information. For more information, see [myPrintMileage](#).
- **Help Information:** Provides links to HP Instant Support and HP Total Care, as well as to this guide for help in performing tasks and troubleshooting. It also provides instructions that guide you through registering the printer onscreen. For more information, see [HP Instant Support](#).

## Printer Services tab

The **Printer Services** tab provides utilities that help you maintain and test your printer. You can align and clean your print cartridges, or print a demo page.

- **Diagnose Print Quality:** Click this button to open a dialog box, where you can print a page to help you decide if you need to run any printer maintenance tools to improve print quality.
- **Test Paper Feed:** Click this button to open a dialog box, where you can have the printer print 20 blank pages to ensure that the print path is free of obstructions and working properly.
- **Test Paper Skew:** Click this button to open a dialog box, where you can print a page to help you decide if the printer has a problem with paper skew.
- **Print Configuration Page:** Click this button to print a printer configuration page. For more information, see [Understanding and printing the configuration page](#).
- **Align Printheads:** Click this button to align the printheads. For more information, see [To align the printheads](#).
- **Clean Printheads:** Click this button to automatically clean the printheads. For more information, see [To clean printheads automatically](#).
- **Calibrate Color:** Click this button to balance color tints on printed pages. For more information, see [Calibrating the color](#).
- **Configure Output Ramp:** Click this button to open a dialog box, where you can turn on the output ramp for printing in Fast Normal mode. Doing this might help prevent ink smears on printouts.

## HP Printer Utility (Mac OS)

The HP Printer Utility contains tools to configure print settings, calibrate the printer, clean the printheads, print configuration and test pages, order supplies online, and find website support information; for example, tools to complete printer maintenance tasks such as printer calibration.

### To open the HP Printer Utility

1. From the Finder, select **Computer** from the **Go** menu.
2. Click **Library**, and then click **Printers**.
3. Click **hp**, click **Utilities**, and then click **HP Printer Selector**.
4. Select the printer, and then click **Launch Utility**.

### HP Printer Utility panels

The utility contains the following panels:

#### Information And Support

- **Supplies Status:** Displays ink levels and information for the print cartridges.
- **Device Information:** Prints a configuration page that provides information about the printer.
- **Print Quality Diagnostics:** Prints a diagnostics page.
- **Test Paper Feed:** Prints 20 blank pages to ensure paper path is clear.

- **Test Paper Skew:** Checks for paper skew.
- **Clean:** Cleans the printheads.
- **Align:** Aligns the printheads for best possible print quality.
- **Calibrate Color:** Adjusts color to correct problems with tint.
- **HP Support:** Provides access to the HP website where you can register the printer, find support for the printer, and find information about returning and recycling used printing supplies.

## Printer Settings

- **Network Settings:** Configure IP settings.
- **Additional Settings:** Opens the Embedded Web Server.

## Embedded Web server (EWS)

When the printer is connected to a network, you can use the printer's EWS to view status information, change settings, and manage the printer at your computer.



**NOTE** For a list of system requirements for the EWS, see [Printer specifications](#). Some settings might be restricted by the requirement for an EWS password. You can open and use the EWS without being connected to the Internet. However, some features will not be available.

## Opening the EWS



**NOTE** To open the EWS from the Toolbox (Windows) or the HP Printer Utility (Mac OS), the printer must be on a network and must have an IP address.

### To open from a Web browser

- ▲ In a supported Web browser on your computer, type the IP address that has been assigned to the printer. For example, if the IP address is 123.123.123.123, type the following address into the Web browser:

<http://123.123.123.123>

The IP address for the printer is listed on the configuration page; see [Understanding and printing the configuration page](#).

### To open from the Toolbox (Windows)

- Open the Toolbox. For instructions, see [Toolbox \(Windows\)](#).
- Click the **Information** tab, and then click **Launch EWS**.

### To open from the HP Printer Utility (Mac OS)

- ▲ Open **Printer Settings**, click **Additional Settings**, and then click **Open Embedded Web Server**.
- ▲ After you open the EWS, you can bookmark it so that you can return to it quickly in the future.



## EWS pages

The EWS contains pages that you can use to view product information and change printer settings. The pages also contain links to other e-services.

Pages	Contents
Information	Shows status information about the printer, its ink supplies and usage, and a log of printer events (such as errors).
Settings	Shows the settings that have been configured for the printer and gives you the ability to change these settings.
Networking	Shows network status and the network settings that have been configured for the printer. These pages only appear if the printer is connected to a network. For more information, see <a href="#">Configure network options</a> .
Other Links	<p>Connects you to other resources, including e-services, such as HP Instant Support, myPrintMileage, and online ordering of supplies. For more information, see <a href="#">HP Instant Support</a> and <a href="#">myPrintMileage</a>.</p> <p>You can also add or customize a link to the website of your choice. This link appears on the left pane throughout the EWS pages.</p>

## HP Web Jetadmin software

The HP Web Jetadmin software is a Web-based management solution for remotely installing, configuring (both individually or in batch mode), monitoring status (including levels for supplies), conducting remote diagnostics, and troubleshooting a wide variety of HP and non-HP network peripherals.

After the HP Web Jetadmin software has been installed, you can gain access to it from anywhere within your intranet by using a standard Web browser.

For more information or to download the software, see [www.hp.com/go/webjetadmin](http://www.hp.com/go/webjetadmin).

## myPrintMileage

myPrintMileage is a service that HP provides to help you keep track of your device usage to help you forecast device usage and plan the purchase of supplies. It consists of the myPrintMileage website.

To use myPrintMileage, you must have the following:

- Internet connection
- Device connected



**NOTE** HP recommends that you enable myPrintMileage to send data for three to six months to allow a meaningful amount of data to accumulate on the myPrintMileage website. To use the print accounting features, you must register for the service through the myPrintMileage site.

On the myPrintMileage website, you can see the following items:

- Print analysis, such as the amount of ink you have used, whether you use more black or color ink, and the estimated number of pages you can print with the remaining amount of ink.
- Print accounting, which allows you to generate reports showing usage data, cost per page, or cost per job for a specific time period; export this data as Microsoft Excel spreadsheet files; and configure the e-mail alerts and notifications to receive print accounting reports.

### Gaining access to myPrintMileage

- **Toolbox (Windows)**

On the **Information** tab, click **myPrintMileage**, and then follow the onscreen instructions.

- **Embedded Web server**

Click **myPrintMileage** in the **Other Links** section.

- **Windows taskbar**

Right-click the **Toolbox** icon in the Windows taskbar, click **myPrintMileage**, and then select **View my print usage**.



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**NOTE** Do not bookmark the Web pages that are used to open myPrintMileage. If you bookmark the site and connect to it by using the bookmark, the pages will not contain the current information.

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## HP Instant Support

HP Instant Support is a suite of Web-based troubleshooting tools that help you quickly identify, diagnose, and resolve printing problems.

It provides the following information about your device:

- **Easy access to troubleshooting tips**

Provides tips that are customized for your device.

- **Resolution of specific device errors**

Provides immediate access to information that can help you resolve error messages specific to your device.

To see a description of the problem, as well as recommendations for solving or preventing the problem, click the link within the message. To see a list of past device errors, click **Alerts** on the left side of the HP Instant Support page.

- **Notification of device driver and firmware updates**

Alerts you when there is a firmware or driver update, a message appears on the HP Instant Support home page. Click the link within the message to go directly to the download section of the HP website.

- **Obtaining support services**

Provides a list of the support services that are available for your device.

- **Managing ink and media usage (myPrintMileage)**

Helps you manage and forecast printer supplies usage.

- **Self diagnostic testing for your device**

Runs a diagnostic test of your device. Select **Printer** on the **Self Help** menu on the Instant Support page to start diagnosing the devices. HP Instant Support checks the computer, and a list of configured devices appears. When you select the device that you want to diagnose, HP Instant Support can help you with such tasks as making sure that you have the latest device driver available and gaining access to reports about the device status and detailed device-diagnostic information.

If any errors are detected during this process, you are given the option to perform updates to the device drivers or Jetdriver firmware or to perform detailed diagnostic tests on the device.

- **HP expert help online (Active Chat)**

Provides personalized help from an HP Total Care Representative over the Web at any time. Simply submit a question or a description of your problem. Your recent device history, system configuration, and any actions that you have attempted are automatically forwarded to HP (upon your approval) so that you will not need to describe the problem again. An HP Total Care Representative will respond online to solve your problem through a real-time Web chat.

- **Knowledge database**

Use the HP knowledge database to quickly find answers to your questions.

## Security and privacy

When you use HP Instant Support, detailed device information, such as the serial number, error conditions, and status, is sent to HP. HP respects your privacy and manages this information according to the guidelines that are outlined in the HP Online Privacy Statement. See [www.hp.com/country/us/eng/privacy.htm](http://www.hp.com/country/us/eng/privacy.htm).



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**NOTE** To view all the data that is sent to HP, select **Source** (for Internet Explorer and Opera) or **Page Source** (for Netscape, Mozilla Firefox, or Safari) from the View menu in your Web browser.

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## Gaining access to HP Instant Support

- **Toolbox (Windows)**

Click the **Information** tab, and then click **HP Instant Support**.

- **Embedded Web server**

In a Web browser, type the IP address assigned to the device. This information is listed on the configuration page; see [Understanding and printing the configuration page](#).

In the **Other Links** section of the **Information** or **Settings** tab, click **HP Instant Support**.



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**NOTE** Do not bookmark the Web pages that are used to open HP Instant Support. If you bookmark the site and connect to it by using the bookmark, the pages will not contain the current information.

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## HP Network Printer Setup Utility (Mac OS)

The HP Network Printer Setup Utility allows you to configure network settings for the printer. You can configure settings such as network location name, and settings such as TCP/IP address, router, and subnet mask.

### To open the HP Printer Network Setup Tool

1. From the Finder, select **Computer** from the **Go** menu.
2. Select **Library**, and then select **Printers**.
3. Select **hp**, select **Utilities**, and then select **HP Printer Network Setup Tool**.
4. Follow the onscreen instructions to configure network settings for the printer.

## HP Deskjet Control Panel (HP DJCP)

The HP Deskjet Control Panel (HP DJCP) allows you to gain access to useful printer features when you are printing from MS-DOS. The HP DJCP utility allows you to do the following tasks:

- Adjust print settings. (Printing using special features is not supported.)
- Specify the default printer from your MS-DOS program.
- Set the symbol set for the language you are using in a document.



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**NOTE** Changes made to settings in your MS-DOS program might override changes made to the same settings in the HP DJCP.

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For more information or to download the utility, see [www.hp.com/support/officejetprok850](http://www.hp.com/support/officejetprok850).

# Understanding and printing the configuration page

Use the configuration page to:

- View current printer settings, ink supply status, and printhead health.
- Help troubleshoot printer problems.

The configuration page also contains a log of recent events. If the printer is connected to a network, an additional network configuration page prints; this page shows the network settings for the printer.

For more information on HP Ink Supplies, see [HP supplies and accessories](#).

## Understanding a configuration page

If you need to call HP, it is often useful to print the configuration page before calling.

### Configuration page



1	<b>Printer Information:</b> Shows general printer information, such as the firmware version number, model name, and amount of memory that is installed.
2	<b>Ink Cartridge Status:</b> Shows the estimated ink levels (represented in graphical form as gauges).

3	<b>Printhead Status:</b> Shows the printhead health status and whether the printhead needs to be replaced.
4	<b>Event Log:</b> Shows a log of recent events that have occurred.

## Network configuration page

HP Officejet Pro K850 series	
NETWORK CONFIGURATION PAGE	
PAGE 2	
<b>5</b>	<b>General Information</b> Network Status: Ready Active Connection Type: Wired Printer URL: http://16.149.182.150 Serial Number: TH53P18008 Hardware Address (MAC): 001185d06af0 Firmware revision: 20050512 ALP3004A
<b>6</b>	<b>TCP/IP</b> Hostname: HPD06AF0 IP Address: 16.149.182.150 Subnet Mask: 255.255.248.0 Default Gateway: 16.149.176.1 Config By: DHCP DHCP Server: 16.149.3.250 DNS Servers: 16.149.3.242 mDNS Service Name: HP Officejet Pro K850 (D06AF0)
<b>7</b>	<b>802.3 Wired</b> Link Configuration: 100TX FullDplx Auto negotiation: ON
<b>8</b>	<b>Miscellaneous</b> Admin Password: Not Set Total Packets Transmitted: 103 Unicast Packets Transmitted: 51 Broadcast Packet Transmitted: 52 Total Packet Received: 553 Unicast Packet Received: 56 Broadcast Packet Received: 497

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5	<p><b>General Information:</b> Shows information about the current status and connection type of the network, and other information, such as the URL of the embedded Web server and the hardware address of the printer.</p> <p><i>Network Status:</i> This setting can be Ready or Offline. When the setting is Offline, it implies either that the IP is being assigned or negotiated by the DNS server, or that the AutoIP or the network is not available.</p>
6	<p><b>TCP/IP:</b> Shows information on how the printer is configured, such as the hostname, IP address, subnet mask, default gateway, server, and service name. Also contains a Config By field, which shows AutoIP if the printer is connected to a peer-to-peer network, and DHCP if the printer is assigned an IP address or is configured by a DHCP server.</p>
7	<p><b>802.3 Wired:</b> Shows information about the network connection.</p>
8	<p><b>Miscellaneous:</b> Shows information, such as the total, unicast, broadcast packets transmitted and received, and the administrator details.</p> <p><i>Admin Password:</i> Shows Not Set if the administrator password for embedded Web server is disabled; otherwise, it shows Set.</p>

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## Printing a configuration page

- **Printer driver**

On the **Services** tab, click the **Print Configuration Page** button.



- **Toolbox (Windows)**

On the **Printer Services** tab, click **Print Configuration Page**, and then click **Print**.

- **HP Printer Utility (Mac OS)**

Open **Information And Support**. Click **Device Information**, and then click **Print Configuration Page**.

- **Control panel**

Press and hold  (Power button). While holding down the Power button, press  (Cancel button) one time.

# Configuring the printer (Windows)

You can connect the printer directly to a computer, or you can share the printer among other users on a network.



**NOTE** You must have administrator privileges to install a printer driver in Windows 2000 or Windows XP.

## Direct connection

You can connect the printer directly to your computer using a USB cable or an IEEE 1284-compliant bidirectional parallel cable.



**NOTE** Windows NT 4.0 does not support USB. Do not connect a USB and a parallel cable to the printer at the same time. If you install the printer software and connect a printer to a computer running Windows, you can connect additional printers to the same computer with USB cables without reinstalling the printer software.

## Installing printer software and sharing the printer

When setting up the printer, HP recommends that you connect the printer **after** installing the software because the installation program is designed to provide you with the easiest setup experience.

However, if you have connected the printer first, see [Connecting the printer before installing the software](#).

## Installing the software before connecting the printer (recommended)

### To install the software before connecting the printer (recommended)

If your computer meets the system requirements, it is recommended that you install the Toolbox by selecting the full installation option. The Toolbox provides status and maintenance information about your printer. It also provides access to documentation and online help tools for solving printer problems. Without the Toolbox, you will not see printer error messages on your computer screen, and will not have access to the myPrintMileage website. For more information, see [Toolbox \(Windows\)](#).

1. Close any running applications.
2. Insert the Starter CD into the CD drive. The CD menu runs automatically.  
  
If the CD menu does not start automatically, click **Start**, and then click **Run**. Browse to the CD-ROM drive for the computer, click **Setup.exe**, and then click **Open**. In the **Run** dialog box, click **OK**.
3. On the CD menu, click **Install**.
4. Follow the onscreen instructions to complete the installation.
5. When prompted, connect the USB or parallel cable to the computer and the printer. The **Found New Hardware** wizard appears on the computer screen and the printer icon is created in the Printers folder.



**NOTE** You can connect the USB cable at a later time when you need to use the printer. You can also share the printer with other computers using a simple form of networking known as locally shared networking. See [Sharing the printer on a locally shared network](#).



## Connecting the printer before installing the software

### To connect the printer before installing the software

If you connected the printer to the computer before installing the printer software, the **Found New Hardware** wizard appeared on the computer screen.



**NOTE** If you have turned on the printer, do not turn off the printer or unplug the cable from the printer while the installation program is running. If you do so, the installation program will not finish.

1. In the **Found New Hardware** dialog box that provides the option for selecting a method to locate the driver, select the advanced option and click **Next**.



**NOTE** Do not allow the Found New Hardware wizard to perform an automatic search for the driver.

2. Select the check box for specifying the driver location, and then ensure that the other check boxes are clear.
3. Insert the Starter CD into the CD-ROM drive. If the CD menu appears, close the CD menu.
4. Browse to locate the root directory on the Starter CD (for example, D:), and then click **OK**.
5. Click **Next**, and then follow the onscreen instructions.
6. Click **Finish** to close the **Found New Hardware** wizard. The wizard automatically starts the installation program (this might take a short time). For Windows 98 and Windows Me, you must complete the installation program if you wish to install a non-English driver.
7. Complete the installation process.



**NOTE** The setup program provides options to install non-driver components such as the Toolbox, which you are recommended to install. For instructions about installing these components, see [Installing the software before connecting the printer \(recommended\)](#). You can also share the printer with other computers using a simple form of networking known as locally shared networking. See [Sharing the printer on a locally shared network](#).

## Sharing the printer on a locally shared network

### To share the printer on a locally shared network

In a locally shared network, the printer is connected directly to the USB or parallel connector of a selected computer (known as the server) and is shared by other computers (clients).



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**NOTE** When sharing a directly connected printer, use the computer with the newest operating system as the server. For example, if you have a computer running Windows 2000 and another computer running an older version of Windows, use the computer running Windows 2000 as the server. Use this configuration only in small groups or when usage is low. The computer that is connected to the printer is slowed down when many users print to the printer.

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1. From the Windows desktop, click **Start**, point to **Settings**, and then click **Printers**. Or, click **Start**, click **Control Panel**, and then click **Printers and Faxes** or **Printers** (depending on the operating system).
2. Right-click the printer icon, click **Properties**, and then click the **Sharing** tab.
3. Click the option to share the printer, and then give the printer a share name.
4. If you are sharing the printer with client computers that use other versions of Windows, you can click **Additional Drivers** to install their drivers as a convenience to them. This optional step requires you to have the Starter CD in your CD drive.

## Network connection

If the printer has network capability, the printer can be shared in a network environment by connecting it directly to the network. This type of connection offers the ability to manage the printer using the embedded Web server from any computer on the network.

### Installing printer software and sharing the printer

Choose the installation option for the type of network you have:

- **Client/server network:** If your network has a computer acting as a dedicated print server, install the printer software on the server ([Installing the printer software for a network printer](#)), and then install the printer software on the client computers ([Installing the printer software on client computers](#)).
- **Peer-to-peer network:** If you have a peer-to-peer network (a network without a dedicated print server), install the software on the computers that will be using the printer ([Installing the printer software for a network printer](#)).

In addition, you can connect to a network printer in both types of networks using the **Add Printer** wizard in Windows ([Installing the printer driver using Add Printer](#)).

### Installing the printer software for a network printer

Use the following steps to install the printer software in the following networking scenarios:

- Your network has a computer acting as a dedicated print server
- You have a peer-to-peer network (a network without a dedicated print server)

#### To install the printer software for a network printer

1. Connect the printer to the network.
2. Close any programs that are open.
3. Insert the Starter CD into the CD-ROM drive. The CD menu starts automatically.

If the CD menu does not start automatically, click **Start**, and then click **Run**. Browse to the CD-ROM drive for the computer, click **Setup.exe**, and then click **Open**. In the **Run** dialog box, click **OK**.

4. Click **Install** and follow the onscreen instructions to complete the installation.
5. If you are going to share this printer with other computers on the network, follow these steps:
  - a. From the Windows desktop, click **Start**, point to **Settings**, and then click **Printers**. Or, click **Start**, click **Control Panel**, and then click **Printers and Faxes** or **Printers** (depending on the operating system).
  - b. Right-click the printer icon, click **Properties**, and then click the **Sharing** tab.
  - c. Click the option to share the printer, and then enter a share name for the printer.
  - d. If you are sharing the printer with client computers that use other versions of Windows, click **Additional Drivers**.
  - e. In the **Additional Drivers** window, click the applicable operating systems, and then follow the onscreen instructions.
6. To share the printer with other computers on the network, see [Installing the printer software on client computers](#).

## Installing the printer software on client computers

After the printer drivers have been installed on the computer that is acting as the print server, the printing functionality can be shared. Individual Windows users who want to use the network printer must install the software on their computers (clients).

A client computer can connect to the printer in the following ways:

- In the **Printers** folder, double-click the **Add Printer** icon and follow the instructions for a network installation. (See [Installing the printer driver using Add Printer](#).)
- On the network, browse to the printer and drag it to your **Printers** folder.
- Add the printer and install the software from the INF file on your network.

On the Starter CD, the INF files are stored in folders that use the following format: <CD drive>:\Drivers\<operating system>\<language>.

For example, if your CD drive letter is D, then D:\Drivers\Win2k\_XP\English would contain the English INF file for Windows 2000, Windows Server 2003, and Windows XP.

## Installing the printer driver using Add Printer



**NOTE** If the printer server computer is running Windows NT 4.0 and the client computer is running Windows 2000 or XP, you must create a locally shared port on the client computer. See “To create a locally shared port” below.

### To install the printer driver using Add Printer

1. From the Windows desktop, click **Start**, point to **Settings**, and then click **Printers**. Or, click **Start**, click **Control Panel**, and then click **Printers and Faxes** or **Printers** (depending on the operating system).
2. Double-click **Add Printer**, and then click **Next**.
3. Select **Network Printer** or **Network Printer Server**.
4. Click **Next**.
5. Do one of the following:
  - Type in the network path or queue name of the shared printer, and then click **Next**. Click **Have Disk** when prompted to select the printer model.
  - Click **Next**, and then locate the printer in the **Shared printers** list.
6. Click **Next**, and then follow the onscreen instructions to complete the installation.

### To create a locally shared port

1. From the Windows desktop, click **Start**, point to **Settings**, and then click **Printers**. Or, click **Start**, click **Control Panel**, and then click **Printers and Faxes** or **Printers** (depending on the operating system).
2. Right-click the printer icon, click **Properties**, and then click the **Ports** tab.
3. Click **Add Port**, click **Local Port**, and then click **New Port**.
4. Enter a name for the new port, then click **OK**, and then click **Close**.
5. Click **Close** again.

# Configuring the printer (Mac OS)

You can use the printer with a single Macintosh computer using a USB cable, or you can share the printer among other users on a network.

## Installing the software for network or direct connection

### To install the software for network or direct connection

1. Connect the printer to the computer with the USB cable or to the network with a network cable.
2. Insert the Starter CD into the CD-ROM drive.
3. Click **Install Driver** and follow the onscreen instructions.
4. Select your connection type, click **Done**, and then follow the onscreen instructions.
5. If open, close the Print Center or Printer Setup Utility.
6. If necessary, share the printer with other Macintosh computer users.
  - **Direct connection:** Share the printer with the other Macintosh computer users. For more information, see [Sharing the printer on a locally shared network](#).
  - **Network connection:** Individual Macintosh computer users who want to use the network printer must install the printer software on their computers.

## Sharing the printer on a locally shared network

When you connect the printer directly, you can still share the printer with other computers using a simple form of networking known as locally shared networking. Use this configuration only in small groups or when usage is low. The computer that is connected to the printer is slowed down when many users print to the printer.

Basic requirements for sharing in a Macintosh environment include the following items:

- The Macintosh computers must be communicating on the network using TCP/IP, and the Macintosh computers must have IP addresses. (AppleTalk is not supported.)
- The printer that is being shared must be connected to a built-in USB port on the host Macintosh computer.
- Both the host Macintosh computer and the client Macintosh computers that are using the shared printer must have printer-sharing software installed and the printer driver or PPD for the printer that is installed. (You can run the installation program to install the printer sharing software and associated Help files.)
- The client Macintosh computers should have the appropriate HP printer drivers installed.
- The client Macintosh computers must be PowerMac computers.

For more information about USB printer sharing, see the support information that is available on the Apple website ([www.apple.com](http://www.apple.com)) or the Mac Help on the computer.

### To share among computers with the same operating system

1. Turn on printer sharing on the Macintosh computer (the host) that is connected to the printer:  
Open **System Preferences**, click **Sharing**, click **Services**, and then select the **Printer Sharing** check box.
2. To print from the other Macintosh computers (the clients) on the network, preselect the printer in **Sharing**. Then, choose the neighborhood where the printer is shared and select the printer.

# Uninstalling the printer software

## Uninstalling the printer software (Windows)

If you are using Windows 2000 or Windows XP, you must have administrator privileges to uninstall the printer software.

### To uninstall the printer software

1. If the computer is connected directly to the computer using a USB cable, disconnect the printer.
2. Close any applications that are running.
3. From the Windows desktop, click **Start**, and then click **Control Panel**.
4. Double-click **Add/Remove Programs**.
5. Select the printer software that you wish to remove, and then click the button for adding or removing software.
6. Follow the onscreen instructions to remove the software.



**NOTE** If the uninstall process fails, restart the computer and complete the steps above to uninstall the software.

If the software was not successfully installed or the installation program could not be found, complete the following steps to run the uninstaller utility. (The uninstaller utility is not available for computers running Windows NT 4.0.)

7. Disconnect the printer from the computer.
8. On the computer, restart Windows.
9. Insert the Starter CD in the CD drive, click **Utilities**, and then click the **Uninstaller**.

## Uninstalling the printer software (Mac OS)

### To uninstall the printer software

1. If the computer is connected directly to the computer using a USB cable, disconnect the printer.
2. Restart the computer.



**NOTE** If you do not restart the computer before you uninstall the software, some files are not removed from your computer when you run the Uninstall option.

3. Insert the Starter CD into the CD drive.
4. Double-click the CD icon on the desktop.
5. Double-click the setup icon and follow the onscreen instructions.
6. When the **Main Installation** dialog box appears, select **Uninstall** from the drop-down list located in the upper-left part of the dialog box.
7. Follow the onscreen instructions to remove the printer software.





# 5 Maintaining and troubleshooting

This section provides information on maintaining ink cartridges and printheads, calibrating color and line feed, using the configuration page, and troubleshooting various problems.

## Replacing the ink cartridges

You can check the ink levels from the Toolbox (Windows) or the embedded Web server. For information about using these tools, see [Overview of printer management tools](#).

After removing a cartridge from its package, install it right away. Do not remove a cartridge from the printer for long periods of time.



**CAUTION** HP recognizes customer's choice, but cannot guarantee the quality or reliability of non-HP ink cartridges. Printer services or repairs required as a result of using non-HP or refilled ink cartridges is not covered under warranty.



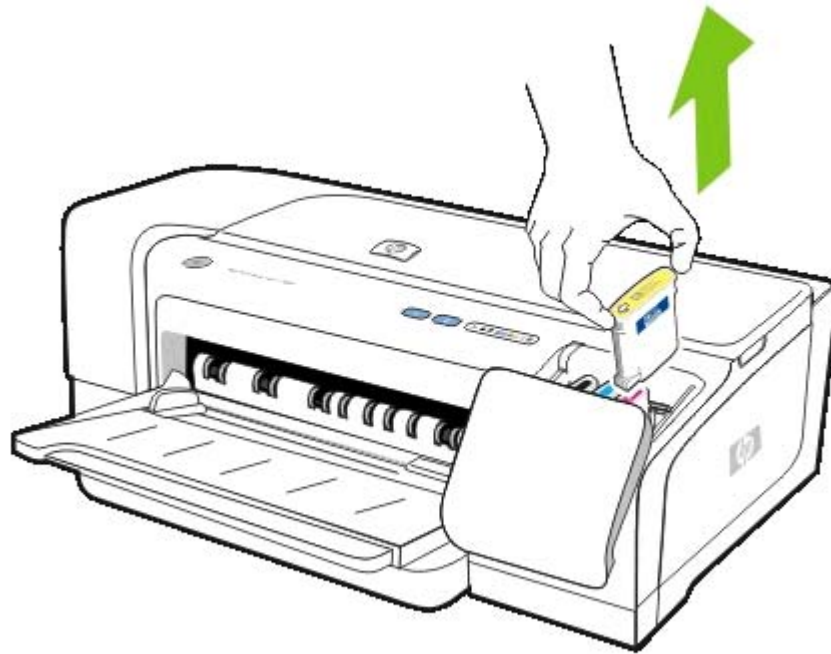
**NOTE** To find out which ink cartridges work with your printer, see [HP supplies and accessories](#).

### To replace an ink cartridge

1. Press and release to open the ink cartridge cover.



2. Remove the ink cartridge that requires replacement by grasping it between your thumb and forefinger and pulling it firmly toward you.



3. Remove the new ink cartridge from its package.
4. Insert the cartridge into its own color-coded slot. Press down firmly on the cartridge to ensure proper contact.
5. Close the ink cartridge cover.

# Maintaining the printheads

If printed characters are incomplete, or dots or lines are missing from printouts, this might be caused by clogged ink nozzles and you might need to clean the printheads. To find out which printheads work with your printer, see [HP supplies and accessories](#).

When the quality of printouts deteriorates, complete the following:

- Check the health of the printheads. See [To check printhead health](#).
- Align the printheads. See [To align the printheads](#).
- Initiate the automatic printhead cleaning process. See [To clean printheads automatically](#).
- Manually clean the printhead contacts. See [To clean the printhead contacts manually](#).
- Replace the printheads, if the problems persist after cleaning. See [Replacing the printheads](#).



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**CAUTION** HP is not responsible for damage to the printer that results from modifying the printheads.

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## To check printhead health

Use the following means to check the printhead health. If the status of any printhead is bad, clean or replace the printhead.



### Toolbox (Windows)

Open the Toolbox. Click the **Information** tab, and then click **Printhead Health**.

### Embedded Web server

Open the embedded Web server. Click the **Information** tab, and then click **Ink Supplies** in the left pane.

### Configuration page

From the control panel, print a printer configuration page by holding down  (Power button), pressing  (Cancel button) once, and then releasing the Power button.

Check the message in the Printhead health line of the Printhead Status section of the configuration page. See [Understanding and printing the configuration page](#).

## To align the printheads

Whenever you replace a printhead, the printer automatically aligns the printheads to ensure the best print quality. However, if the appearance of your printed pages indicates that the printheads are misaligned, you can align them manually.

### Printer driver

- In Windows 2000 or XP, click the **Services** tab, click **Service this device**, and then follow the onscreen instructions.
- In Windows 98, click the **Services** tab, click **Align Printheads**, and then follow the onscreen instructions.

### Toolbox (Windows)

- ▲ Click the **Printer Services** tab, and then click **Align Printheads**.



### HP Printer Utility (Mac OS)

- ▲ Open **Information And Support**, click **Align**, and then follow the onscreen instructions.

### Embedded Web server

1. Open the embedded Web server.
2. Click the **Settings** tab.
3. Click **Maintenance** in the left pane.
4. In the **Printhead** section, click **Align printheads** in the drop-down list.

### Control panel

1. Hold down  (Power button).
2. Press  (Resume button) two times.

## To clean printheads automatically



**NOTE** Clean the printheads only when necessary; cleaning uses ink and shortens the life of the printheads. There are three levels of cleaning available. After one level of cleaning, perform the next level of cleaning only if the results are not satisfactory.

### Printer driver

- In Windows 2000 or XP, click the **Services** tab, click **Service this device**, and then follow the onscreen instructions.
- In Windows 98, click the **Services** tab, click **Clean Printheads**, and then follow the onscreen instructions.

### Toolbox (Windows)

- ▲ Click the **Printer Services** tab, and then click **Clean Printheads**


### HP Printer Utility (Mac OS)

- ▲ Open **Information And Support**, click **Clean**, and then follow the onscreen instructions.

### Embedded Web server





1. Open the embedded Web server.
2. Click the **Settings** tab.
3. Click **Maintenance** in the left pane, and then click the appropriate cleaning level in the drop-down list in the **Printhead** section.

## Control panel

1. Press and hold  (Power button).
2. While holding down the button, do one of the following.



**NOTE** Perform the next level of cleaning only if results from the previous level are not satisfactory.

- a. For level 1 cleaning: Press  (Resume button) five times.
  - b. For level 2 cleaning: Press  (Resume button) six times.
  - c. For level 3 cleaning: Press  (Resume button) seven times.
3. Release  (Power button). The printer begins the cleaning process.


## To clean the printhead contacts manually



**CAUTION** Manually clean the printhead contacts only after you have attempted to clean the printheads automatically. See [To clean printheads automatically](#). Printhead contacts contain sensitive electronic components that can be damaged easily.

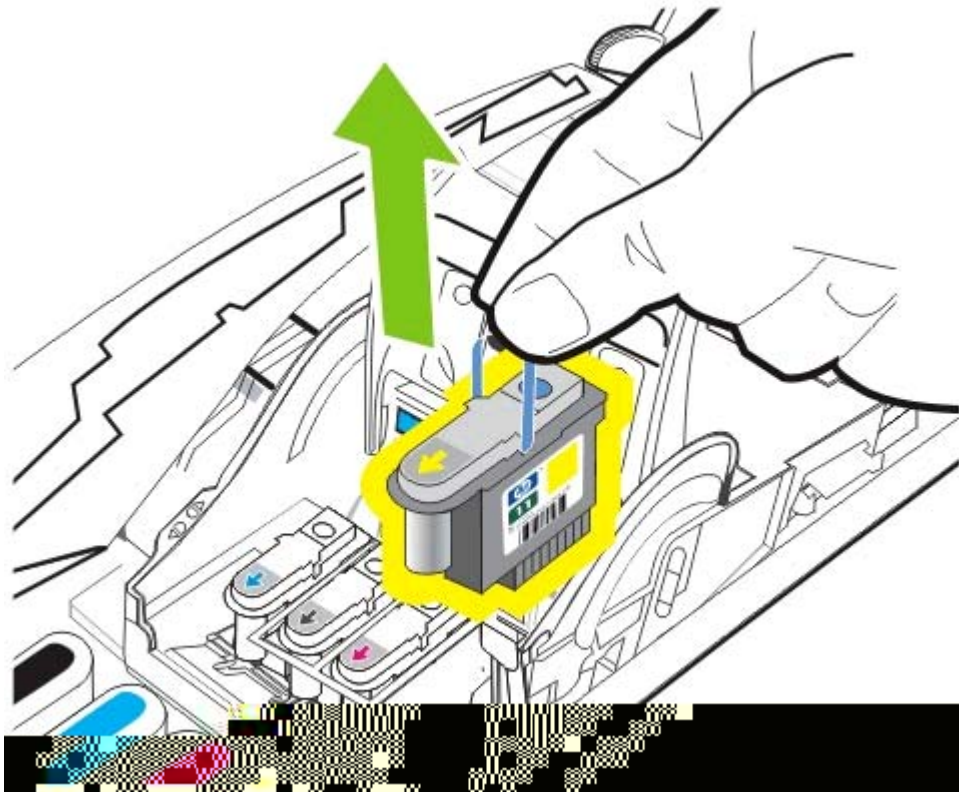
1. Open the top cover.
2. Make sure the printer is turned on.
3. Wait two or three seconds and unplug the printer power cord.



**NOTE** Do not turn the printer off by pressing  (Power button). This causes the print carriage to move out of reach.

4. Lift to open the printhead latch.

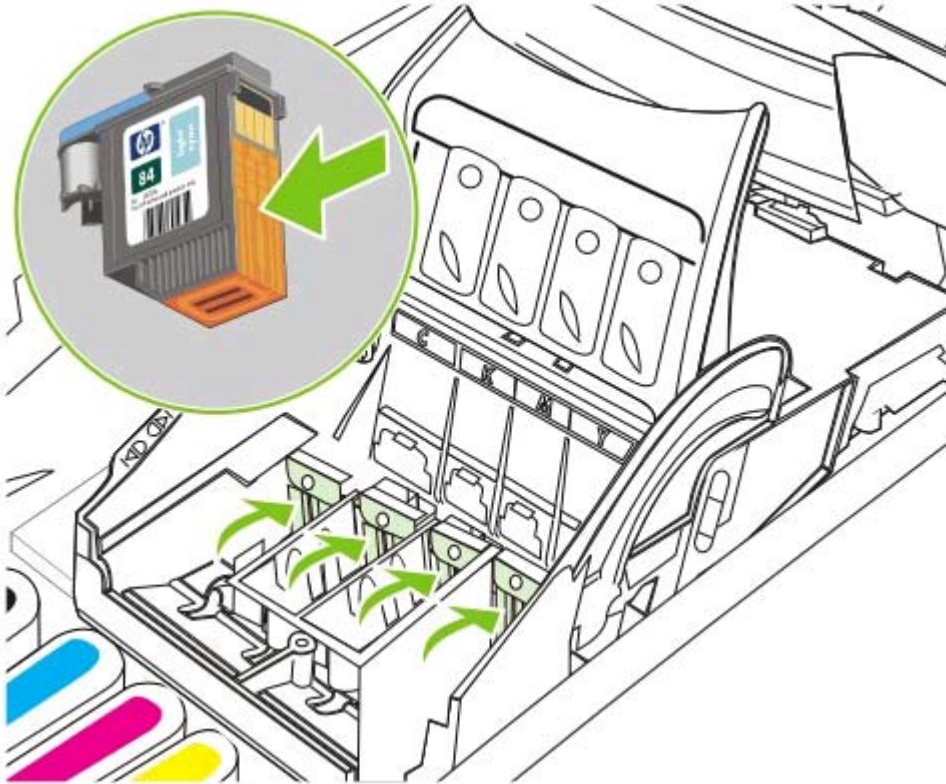
5. Lift the handle of a printhead and use it to pull the printhead out of its slot.



6. Carefully remove any ink from the contact pads on the printhead using a dry cotton swab or a soft, dry, lint-free cloth that will not come apart or leave fibers behind.



**CAUTION** Only wipe the contact pads. Wiping the nozzles (located on the underside of the printhead) can cause severe damage to the printhead.



7. If some residue remains, slightly moisten the swab with distilled, filtered, or bottled water, and continue wiping until the contacts are clean.



**CAUTION** Avoid using drinking water or alcohol, which could damage the printheads.

8. After cleaning, place the printhead on a sheet of paper or paper towel.
9. Clean the contact points in the printhead slot inside the printer with a dampened cotton swab. Before re-inserting the printheads, make sure all the electrical contacts have had at least five minutes to dry.
10. Plug in the power cord and turn on the printer. The control panel should still indicate that a printhead is missing.
11. Insert the printhead into its color-coded slot. Press down firmly on the printhead to ensure proper contact.



**NOTE** If you are installing a new printhead, remove the new printhead from its package, and then remove its protective tape.

12. Pull the printhead latch all the way forward, and then press down to ensure that the latch is properly engaged. You might have to apply some pressure to engage the latch.



13 Close the top cover.

.

14 Where necessary, repeat the above steps for the remaining printheads.

.

15 If you installed a new printhead, wait while the printer initializes it and prints an alignment page. If you removed and reinserted printheads but did not install a new printhead, print an alignment page manually. See [To align the printheads](#).

If the alignment page does not print, make sure the printhead latch and all covers are securely closed.

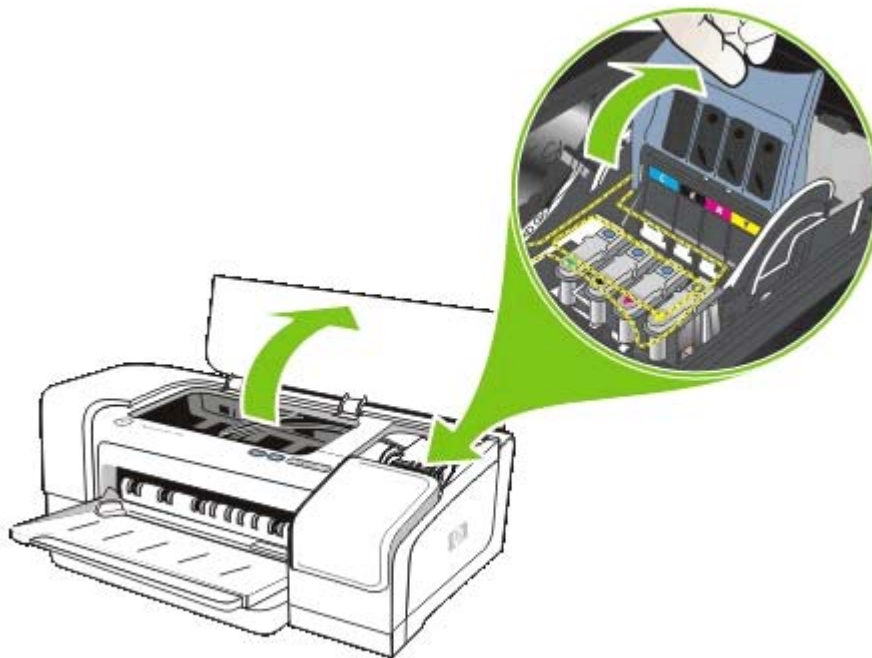
# Replacing the printheads



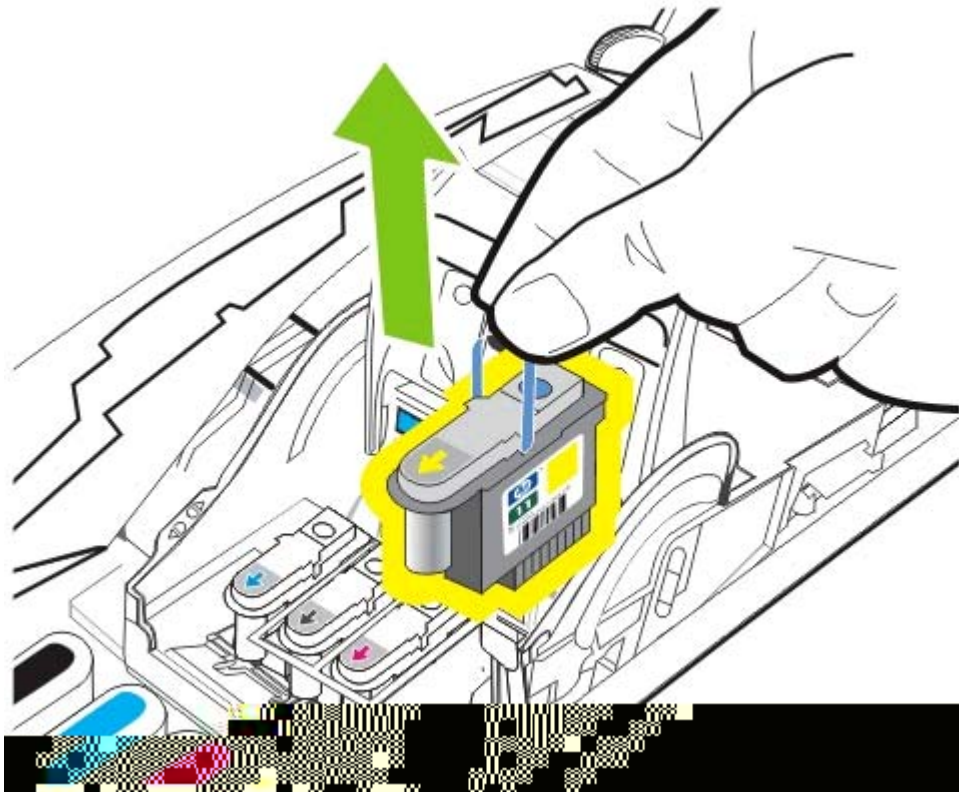
**NOTE** To find out which printheads are compatible with your printer, see [HP supplies and accessories](#).

**NOTE** Only replace printheads after you have attempted to clean the printheads. See [To clean printheads automatically](#) and [To clean the printhead contacts manually](#).

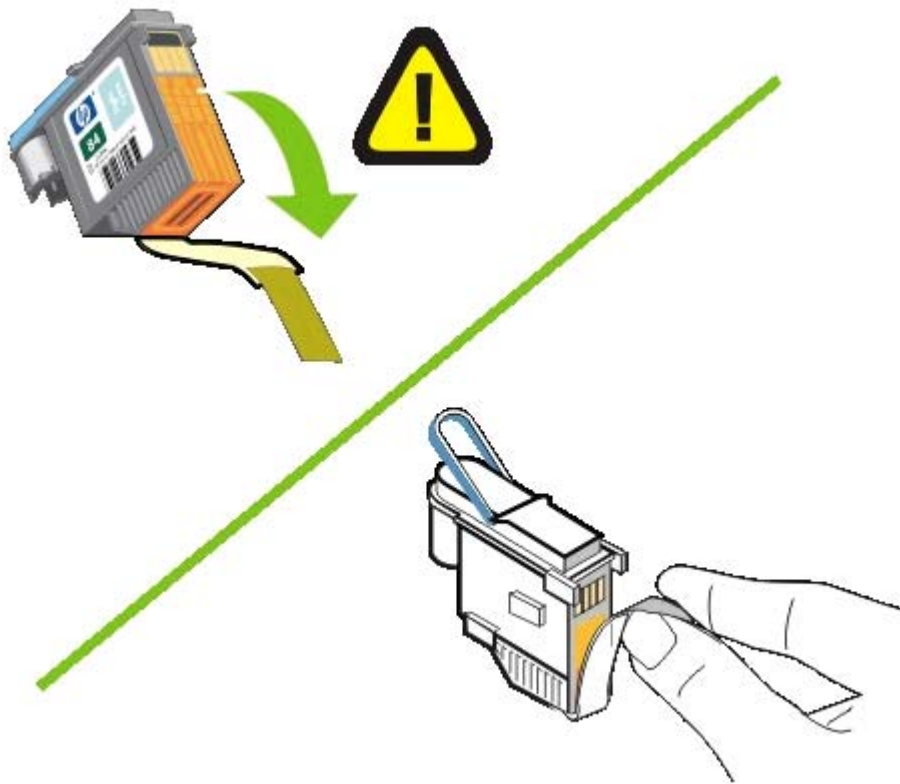
1. Open the top cover.
2. Lift to open the printhead latch.



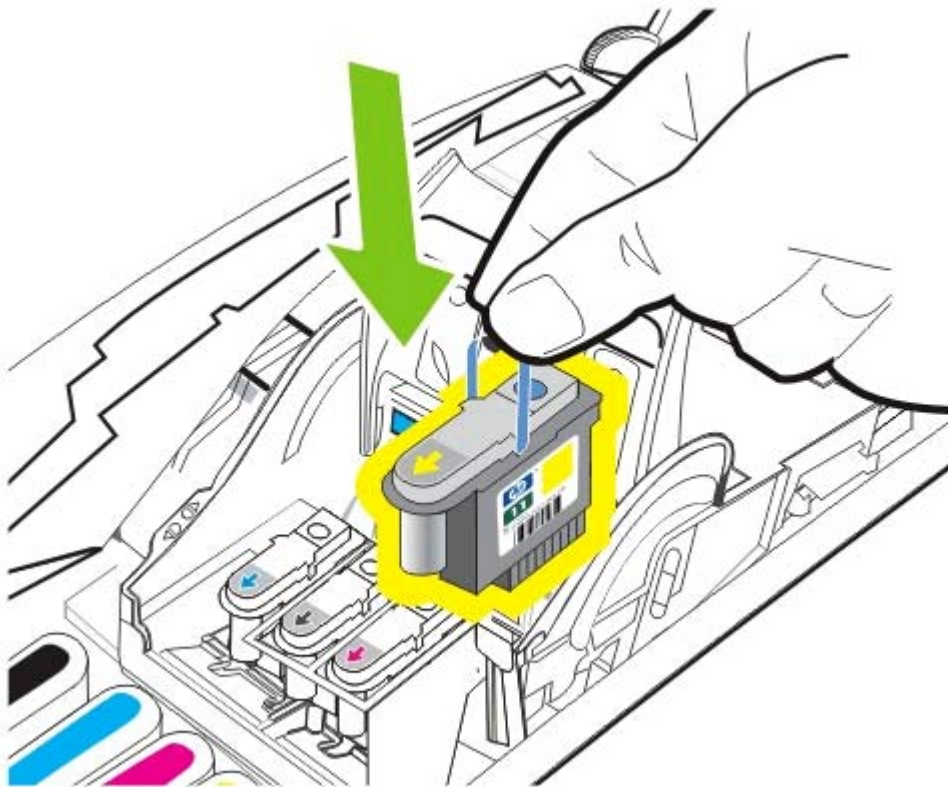
3. Lift the handle of a printhead and use it to pull the printhead out of its slot.



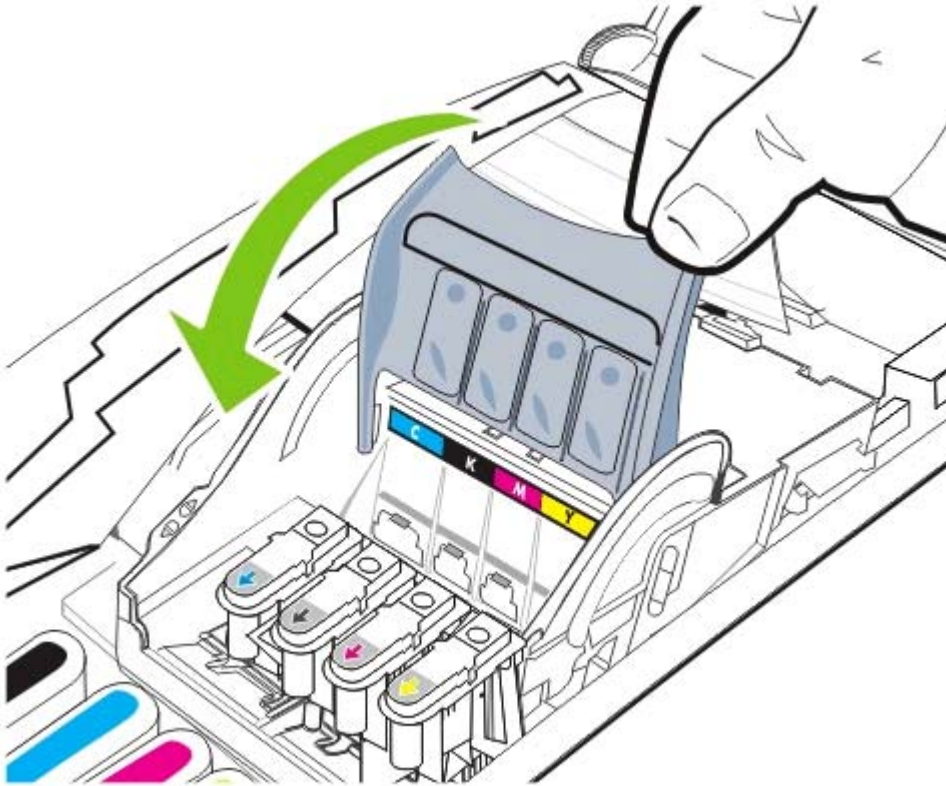
4. Remove the new printhead from its package, and then remove the protective tape.



5. Insert the printhead into its color-coded slot. Press down firmly on the printhead to ensure proper contact.



6. Pull the printhead latch all the way forward, and then press down to ensure that the latch is properly engaged. You might have to apply some pressure to engage the latch.



7. Close the top cover, and then wait while the printer initializes the printheads and prints the alignment pages.

## Diagnosing the print quality

To verify the print quality of the printer, you can perform print quality diagnostics, which involves printing of test patterns. This will help you decide whether to run any maintenance tools to improve the print quality of your printouts.

### Printer driver

- In Windows 2000 or XP, click the **Services** tab, click **Service this device**, and then follow the onscreen instructions.
- In Windows 98, click the **Services** tab, click **PQ (print quality) diagnostic page**, and then follow the onscreen instructions.

### Toolbox (Windows)

- ▲ Click the **Printer Services** tab, click **PQ (print quality) diagnostic page**, and then follow the onscreen instructions.

### HP Printer Utility (Mac OS)

- ▲ Open **Information And Support**, click **Print Quality Diagnostics**, and then follow the onscreen instructions.

## Testing the paper feed

If you encounter frequent jams, perform a paper feed test to ensure that the paper path of the tray or duplex unit is clear. The process will feed 20 blank pages.

- **Printer driver**

Click the **Services** tab, click **Service this device**, and then follow the onscreen instructions.

- **Toolbox (Windows)**

Click the **Printer Services** tab, click **Test Paper Feed**, and then follow the onscreen instructions.

- **HP Printer Utility (Mac OS)**

Open **Information And Support**, click **Test Paper Feed**, and then follow the onscreen instructions.



## Testing media skew

If information on the printed pages is consistently slanted, perform a paper skew test and check if the skew is within the acceptable range for the printer.

- **Printer driver**

Click the **Services** tab, click **Service this device**, and then follow the onscreen instructions.

- **Toolbox (Windows)**

Click the **Printer Services** tab, click **Test Paper Skew**, and then follow the onscreen instructions.

- **HP Printer Utility (Mac OS)**

Open **Information And Support**, click **Test Paper Skew**, and then follow the onscreen instructions.

# Calibrating the color

Whenever you replace a printhead, the printer automatically calibrates the colors to ensure the best print quality. If you are not satisfied with the appearance of the colors, you can calibrate colors manually.

- **Printer driver**

In Windows 2000 or XP, click the **Services** tab, click **Service this device**, and then follow the onscreen instructions.

In Windows 98, click the **Services** tab, click **Calibrate Color**, and then follow the onscreen instructions.

- **Toolbox (Windows)**

Click the **Printer Services** tab, click **Calibrate Color**, and then follow the onscreen instructions.

- **HP Printer Utility (Mac OS)**

Open **Information And Support**, click **Calibrate Color**, and then follow the onscreen instructions.



# Troubleshooting

## Troubleshooting tips and resources

- For a paper jam problem, see [Clearing jams](#).
- For paper-feed problems, such as the paper skew, see [Resolving paper-feed problems](#).

Some printer problems can be resolved by resetting the printer.

### To reset the printer

1. Press  (Power button) to turn off the printer.
2. Disconnect the power cord from the printer.
3. Wait about 10 seconds, and then reconnect the power cord.
4. Press  (Power button) to turn on the printer.

## General troubleshooting tips

Ensure the following:

- Power light is on and not blinking. When the printer is first turned on, it takes approximately 45 seconds to start up.
- No error messages appear on the computer screen.
- No lights on the control panel are on or blinking. See [Printer lights reference](#).
- Power cord and other cables are working and firmly connected to the printer. Make sure the printer is connected firmly to a functioning alternating current (AC) power outlet and is turned on. See [Printer specifications](#) for voltage requirements.
- Media is loaded correctly in the tray and is not jammed in the printer. See [Loading media](#).
- Printheads and ink cartridges are properly installed in their correct color-coded slots. Press down firmly on each one to ensure proper contact. Ensure you have removed the tape from each printhead.
- Printhead latch and all covers are closed.
- Rear-access panel or automatic two-sided printing accessory (duplex unit) is locked into place.
- All packing tapes and materials are removed from the printer.
- Printer can print a configuration page. See [Understanding and printing the configuration page](#).
- The printer is set as the current or default printer. For Windows, set the printer as the default in the Printers folder. For Mac OS, set the printer as the default in the Print Center or Printer Setup Utility. For more information, see your computer's documentation.
- **Pause Printing** or **Use printer offline** is not selected if you are using a computer running Windows.
- You are not running too many programs when you are performing a task. Close programs that you are not using or restart the computer before attempting the task again.

- If the printer is connected directly to a computer, it is set up to point to the correct port.
- If the printer is connected to a network, the correct IP address is used.

## Resolving printing problems

### Printer shuts down unexpectedly

Check power and power connections.

Make sure the printer is connected firmly to a functioning alternating current (AC) power outlet. See [Printer specifications](#) for voltage requirements.

### All printer lights are blinking

A non-recoverable error has occurred.

Reset the printer. See [Troubleshooting](#).

If the problem persists, contact HP. See [Support and warranty](#).

### Printer is not responding (nothing prints)

#### Check printer setup

See [General troubleshooting tips](#).

#### Check the printhead initialization

When new printheads are installed, the printer automatically prints two alignment pages to align the printheads. This process takes about eight minutes. Once the process starts you cannot print until the automatic alignment pages have been printed.

When printheads are removed and then reinserted in the printer, the alignment pages do not print automatically. See [To align the printheads](#).

#### Check the printer software installation

If the printer is turned off when printing, an alert message should appear on your computer screen; otherwise, the printer software might not be installed correctly. To resolve this, uninstall the software completely, and then reinstall the printer software. See [Uninstalling the printer software](#).

#### Check cable connections

- Make sure both ends of the cable (USB, parallel, or network) are secure.
- If the printer is connected to a network, check the following:
  - Verify that the Link light on the back of the printer is on.
  - Make sure you are not using a phone cord to connect the printer.
  - The network hub, switch, or router is on and working properly.

### Check printer setup for network environment

Ensure the correct printer software and printer software port are being used. For more information about network connections, see [Configuring the printer \(Windows\)](#), [Configuring the printer \(Mac OS\)](#), or the documentation provided by your network vendors.

### Check any personal firewall software installed on the computer

The personal software firewall is a security program that protects a computer from intrusion. However, the firewall might block communication between the computer and the printer. If there is a problem communicating with the printer, try temporarily disabling the firewall. If the problem persists, the firewall is not the source of the communication problem. Re-enable the firewall.

If disabling the firewall allows you to communicate with the printer, you might want to assign the printer a static IP address and re-enable the firewall. See [Configure network options](#).

## Printer does not accept printhead

### Inspect the printhead

Remove the printhead and make sure the protective tape has been removed completely from the printhead.

### Clean the printhead

Complete the printhead cleaning procedure. See [To clean printheads automatically](#).

### Turn off the printer after removing the printhead

After removing the printhead, turn the printer off, and then turn on the printer without the printhead installed. After the printer has restarted, reinsert the printhead.

## Printer takes a long time to print

### Check the system configuration

Make sure the computer meets the minimum system requirements for the printer. See [Printer specifications](#).

### Check the port setting

The port setting configuration in your system might not be set to ECP.

See the documentation that came with the computer for information on how to change the port setting, or contact the computer manufacturer.

### Check the printer software settings

The printer prints slower when **Best** or **Maximum dpi** is selected as the print quality. To increase the print speed, select different print settings in the printer software. See [Changing print settings](#).



**NOTE** The recommended print quality setting for printing photos is **Best**.

## Blank page printed

### Check media settings

Make sure the page settings in the printer software matches the width and length of media loaded in the tray. See [Changing print settings](#).

### Check the parallel port on your computer

If you are using a parallel cable, make sure the printer is connected directly to the parallel port. Avoid sharing the port with other devices, such as a Zip drive or other printers.

## Placement of the text or graphics is wrong

### Check how the media is loaded

Make sure the paper guides fit snugly against the edges of the stack of media, and make sure the tray is not overloaded. See [Loading media](#).

### Check the media size

- Content on a page might be cut off if the document size is larger than the media that you are using.
- Make sure the media size selected in the printer driver matches the size of media loaded in the tray.
- If you are using a computer running Windows, select **Emulate LaserJet Margins** in the printer driver to print a LaserJet formatted document.

### Check margin settings

If the text or graphics are cut off at the edges of the page, make sure the margin settings for the document do not exceed the printable area of your printer. See [Setting minimum margins](#).

### Check the page-orientation setting

Make sure the media size and page orientation selected in the application match the settings in the printer driver.

### Check the Preserve Layout setting (Windows)

If you are using a duplex unit to do automatic duplex printing, ensure **Preserve Layout** is selected in the printer driver. Clearing this option might result in unwanted page breaks. See [Printing on both sides \(duplexing\)](#).

### Check the printer location and length of USB cable

High electromagnetic fields (such as those generated by USB cables) can sometimes cause slight distortions to printouts. Move the printer away from the source of the electromagnetic fields. Also, it is recommended that you use a USB cable that is less than 3 meters (9.8 feet) long to minimize the effects of these electromagnetic fields.

If the solutions do not work, the problem might be caused by the inability of the application to interpret print settings properly. See the release notes for known software conflicts; or refer to the application's documentation, or contact the software manufacturer for specific help.

## Poor print quality and unexpected printouts

### Check the printheads and ink cartridges

Replace any clogged or worn printheads or low ink cartridges (see [Maintaining the printheads](#)), and try to print again.

### Check the paper quality

The paper might be too moist or too rough. Make sure the media used meets HP specifications (see [Selecting print media](#)), and try to print again.

### Check the type of media loaded in the printer

- Make sure the tray supports the type of media you have loaded. See [Understanding specifications for supported media](#).
- Make sure you have selected the tray in the printer driver that contains the media you want to use. See [Changing print settings](#).

### Check the printer location and length of USB cable

See [Check the printer location and length of USB cable](#).

### Meaningless characters print

If an interruption occurs to a job that is printing, the printer might not recognize the rest of the job.

Cancel the print job and wait for the printer to return to the ready state. If the printer does not return to the ready state, cancel all jobs, and wait again. When the printer is ready, resend the job. If prompted by the computer to retry the job, click **Cancel**.

### Check cable connections

If the printer and computer are connected with a USB or parallel cable, the problem might be due to a poor cable connection or a cable that is not in working condition.

Make sure the cable connections at both ends are secure. If the problem persists, turn off the printer, disconnect the cable from the printer, turn on the printer without connecting the cable, and delete any remaining jobs from the print queue. When the Power light is on and not flashing, reconnect the cable.

### Check the document file

The document file might be damaged. If you can print other documents from the same application, try printing a backup copy of your document, if available.

### Check the symbol set

If you are using MS-DOS, use the HP DJCP to set the appropriate symbol set for the language of your document. See [HP Deskjet Control Panel \(HP DJCP\)](#).

### Ink is smearing

### Check print settings

- When you print documents that use a large quantity of ink, allow more time to dry before handling the printouts. This is especially true for transparencies. In the printer software, select the **Best** print quality. Also increase the ink drying time and reduce the ink saturation using an ink slider in conjunction with drying time under **Advanced Printing Features** (Windows) or **Ink Features** (Mac OS) in the printer software. However, note that decreasing ink saturation might give printouts a "washed-out" quality.
- Color documents that have rich, blended colors can wrinkle or smear when printed using the **Best** print quality. Try using the other print mode to reduce ink, or use HP Premium Paper designed for printing vivid color documents. See [Changing print settings](#).

### Check the media type

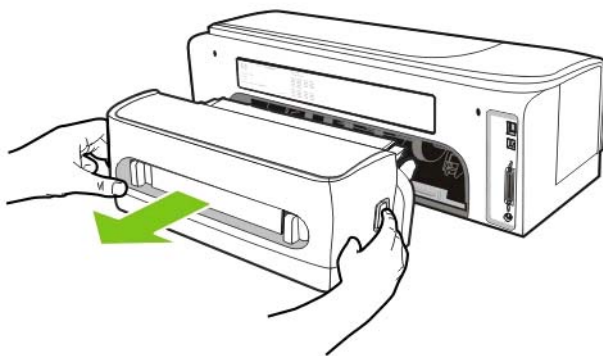
- When using recycled media, you might need to lower the ink volume in the printer software. However, if you lower the ink volume too much, the output might appear washed out.
- Some types of media do not accept ink well; ink will dry more slowly and smearing might occur. See [Selecting print media](#).

### Check the margin settings

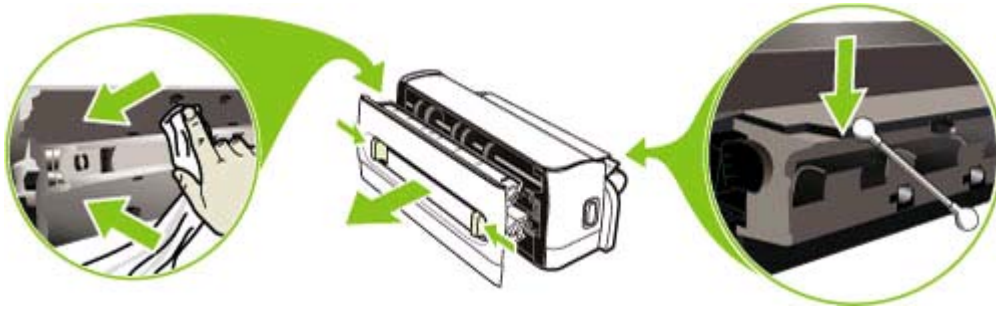
If you are using a computer running Windows, make sure the option to minimize margins is not selected.

### Clean the inside of the automatic two-sided printing accessory

After extensive printing, ink might be deposited on the inside of the duplex unit causing ink to smear when printing on both sides of the paper. To remove the deposited ink, use a lint free cloth to clean the inside of the duplex unit.

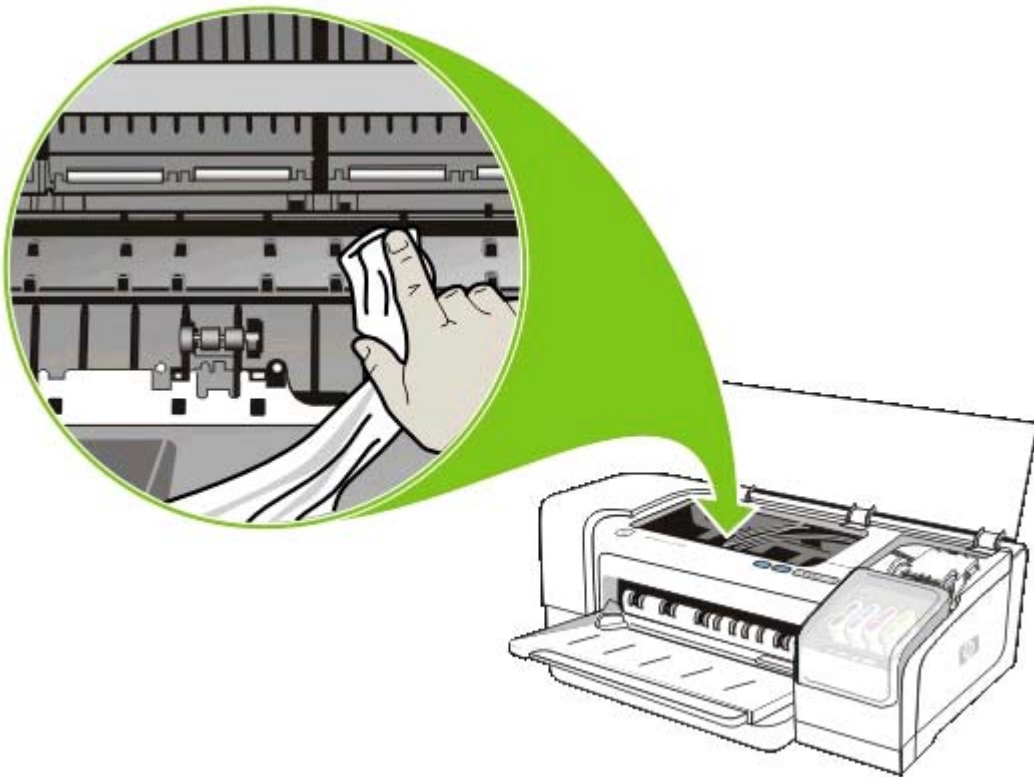






### Clean the print zone of the printer

After extensive printing, ink might be deposited on the print zone of the printer, causing ink to smear on the non-printed side of the media or the edge of a stack of printed media. To remove the deposited ink, use a lint free cloth to clean the print zone, including the plastic ridges.



### Enable the printer's output ramp

When printing in **Fast Normal** (default) print mode, the printer does not use the output ramp to hold each printed page before releasing it onto the output tray. If the printer starts printing the next page while the printed page is still drying on the output tray, the newly printed page might rub against the printed page on the output tray, causing ink to smear. Severity of smearing depends on the amount of ink used on each printed page.

To prevent the printed pages from rubbing against each other, print using the **Normal** or **Best** print mode.

Alternatively, in the Toolbox, turn on the output ramp for printing in **Fast Normal** mode. Click the **Printer Services** tab, and then click **Configure Output Ramp**. See [Toolbox \(Windows\)](#).

## Ink is not filling the text or graphics completely

### Check the ink cartridges

Ink cartridges might have run out of ink. Replace any empty cartridge. Or try removing and reinstalling the cartridges, make sure they snap firmly into place. See [Replacing the ink cartridges](#).

### Check the media type

Some media types are not suitable for use with the printer. See [Selecting print media](#).

## Output is faded or dull colored

### Check the print mode

The **Fast Normal** printer mode allows you to print at a faster rate. It is good for printing drafts. For better results, select **Normal** or **Best**. See [Changing print settings](#).

### Check the paper type setting

When printing on transparencies or other special media, select the corresponding media type in the printer driver. See [Printing on special and custom-size media](#).

### Check the ink cartridges

If lines in the text or image are broken or do not print properly, one or more of the ink cartridges might have run out of ink or are defective. Replace these cartridges with new ones.

## Colors are printing as black and white

Make sure **Print in Grayscale** is not selected in the printer driver.

## Wrong colors are printing

### Check print settings

Make sure **Print in Grayscale** is not selected in the printer driver.

### Check the printheads

Whenever print quality noticeably decreases, you might need to clean the printheads. See [Maintaining the printheads](#).

## Printout shows bleeding colors

### Check print settings

Some media type settings (such as **Transparency Films** and **Photo Papers**) and print quality settings (such as **Best**) require more ink than others. When you choose different print settings in the printer driver, make sure you select the correct media type. See [Changing print settings](#).

### Check ink cartridges

Make sure ink cartridges have not been tampered with. Refilling processes and the use of incompatible inks can disrupt the intricate printing system and result in reduced print quality and damage to the printer. HP does not guarantee or support refilled ink cartridges. For ordering information, see [HP supplies and accessories](#).

## Colors do not line up properly

### Check printheads

The printheads are not automatically aligned when a printhead is replaced. However, you might notice improvement in the print quality by performing the alignment procedure yourself. See [Maintaining the printheads](#).

### Check graphics placement

Use the zoom or print preview feature of your software to check for gaps in the placement of graphics on the page.

## Lines or dots are missing from text or graphics

The printheads or printhead contact pads might need cleaning. See [Maintaining the printheads](#).

## Resolving paper-feed problems

For information on resolving jams, see [Clearing jams](#).

## Media is not supported for the printer or tray

Use only media that is supported for the printer and the tray being used. See [Understanding specifications for supported media](#).

## Media is not picked up from the tray

- Make sure the paper guides are set to the correct markings in the tray for the media size you are loading. Also make sure the guides are snug, but not tight, against the stack.
- Make sure media in the tray is not curled. Uncurl paper by bending it in the opposite direction of the curl. Also, check the ink saturation. To increase the ink drying time and reduce the ink saturation, use an ink slider in conjunction with drying time under **Advanced Printing Features** (Windows) or Ink Features (Mac OS) in the printer software. However, note that decreasing ink saturation might give printouts a "washed-out" quality.

## Media is not coming out correctly

- Make sure the output tray extension is extended, otherwise, printed pages might fall off the printer.
- Remove excess media from the output tray. There is a limit to the number of sheets the tray can hold.

## Pages are skewing

- Make sure the paper guides in the tray are adjusted snugly against the media, but do not crinkle or bend it.
- Avoid loading media of different types or sizes in the tray.
- Make sure media in the tray is not curled. Uncurl paper by bending it in the opposite direction of the curl.
- Run a media skew test in the Toolbox. See [Testing media skew](#).

## Multiple pages are being picked up

- Make sure the paper guides are set to the correct markings in the tray for the media size you are loading. Also make sure the guides are snug, but not tight, against the stack.
- Make sure that the tray is not overloaded with paper.
- When you load paper, avoid fanning the stack. Fanning paper can cause static electricity to build up and intensify multiple-pick problems.

## Embedded Web server (EWS) cannot be opened

### Check your network setup

- Make sure you are not using a phone cord to connect the printer to the network.
- Make sure the network cable is securely connected to the printer.
- Make sure the network hub, switch, or router is on and working properly.

### Check the computer

Make sure the computer that you are using is connected to the network.

### Check your Web browser

Make sure the Web browser meets the minimum system requirements. See [Operating system and network protocol specifications](#).

### Check the printer IP address

- Print a configuration page, and then locate the printer's IP address on the second page. See [Understanding and printing the configuration page](#).
- Ping the printer from an MS-DOS prompt (Windows) or Terminal (Mac OS) using the IP address. For example, if the IP address is 123.123.123.123, type the following at the command prompt and then press the **Enter** key:

```
ping 123.123.123.123
```

If a reply appears, the IP address is correct.

## Troubleshooting installation issues

### Problems printing alignment page

When new printheads are installed, the printer automatically prints two alignment pages to align the printheads. This process takes about eight minutes. Do not open any covers or push any buttons until the alignment pages have printed. The alignment pages may be discarded after they are printed. If the printer does not print the pages, then see [General troubleshooting tips](#) or align the printheads manually (see [To align the printheads](#)).

### Problems installing software

#### Verify the computer requirements

Make sure the computer meets the system requirements. See [Operating system and network protocol specifications](#).

#### Verify installation preliminaries

- The computer meets the system requirements. See [Operating system and network protocol specifications](#).
- Before installing software on a Windows computer, ensure all other programs are closed.
- If the computer does not recognize the path to the CD drive that you type, ensure you are specifying the correct drive letter.
- If the computer cannot recognize the Starter CD in the CD drive, inspect the CD for damage. You can download the printer driver from [www.hp.com/support/officejetprok850](http://www.hp.com/support/officejetprok850).

#### Reinstall the printer software

If you are using Windows and the computer cannot detect the printer, insert the Starter CD, click **Utilities**, and then click **Uninstaller** to perform a clean printer driver uninstallation. Restart your computer, and re-install the printer driver. See [Uninstalling the printer software](#).

### Problems connecting to a network



**NOTE** After correcting any of the following, run the setup program again.

#### General network troubleshooting

If you are unable to install the printer software on the computer, verify that:

- All cable connections to the computer and the printer are secure.
- The network is operational and the network hub is turned on.
- If the Link light on the network connector does not turn on, make sure that all of the [Troubleshooting tips and resources](#) conditions are met.
- All applications, including virus protection programs and personal firewalls, are closed or temporarily disabled.

- Make sure the printer is installed on the same subnet as the computers that will be using the printer.
- If the installation program cannot discover the printer, print the configuration page and enter the IP address manually in the installation program. See [Understanding and printing the configuration page](#).
- Ping the printer from an MS-DOS prompt (Windows) or Terminal (Mac OS) using the IP address. For example, if the IP address is 123.123.123.123, type the following at the command prompt and then press the **Enter** key:

```
ping 123.123.123.123
```

If a reply appears, the IP address is correct.




If you are using a computer running Windows, make sure that the network ports created in the printer driver match the printer IP address:

1. Print a configuration page. See [Understanding and printing the configuration page](#).
2. From the Windows desktop, click **Start**, point to **Settings**, and then click **Printers**. Or, click **Start**, click **Control Panel**, and then click **Printers and Faxes** or **Printers** (depending on the operating system).
3. Right-click the printer icon, click **Properties**, and then click the **Ports** tab.
4. Select the TCP/IP port for the printer, and then click **Configure Port**.
5. Compare the IP address listed in the dialog box and make sure it matches the IP address listed on the configuration page. If the IP addresses are different, change the IP address in the dialog box to match the address on the configuration page.
6. Click **OK** twice to save the settings and close the dialog boxes.

Though it is not recommended that you assign the printer a static IP address, you might resolve some installation problems (such as a conflict with a personal firewall) by assigning the printer a static IP address. For more information, see [Configure network options](#).

### Resetting printer network settings

If the printer is unable to communicate with the network, reset the printer network settings:

While holding down  (Power button), press  (Resume button) three times, and then release  (Power button).

Uninstall and then re-install the printer driver.



**NOTE** For late-breaking information, visit the product support website at [www.hp.com/support/officejetprok850](http://www.hp.com/support/officejetprok850).

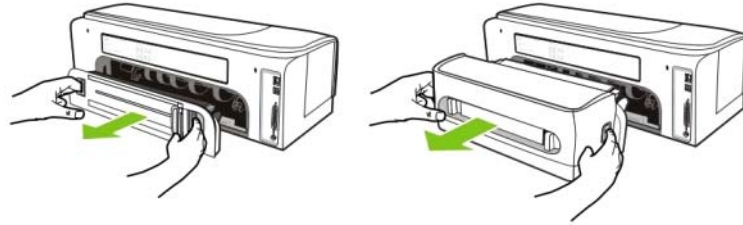
## Clearing jams

### To clear a jam

1. Remove all media from the output tray.

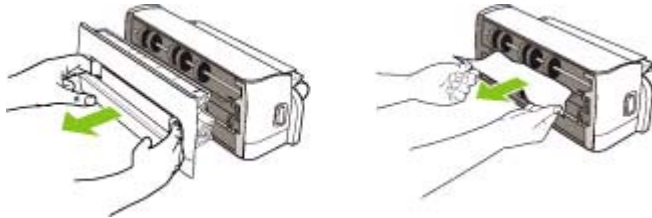
**2.** Check the rear-access panel or the duplex unit.

- a.** Push the button on either side of the rear-access panel or the duplex unit and remove it.



- b.** Locate any jammed media inside the printer, grasp it with both hands and pull it towards you.

- c.** If the jam is in the duplex unit, push the buttons in front of the duplex unit and remove the cover. If the jam is inside, carefully remove it. Close the cover.

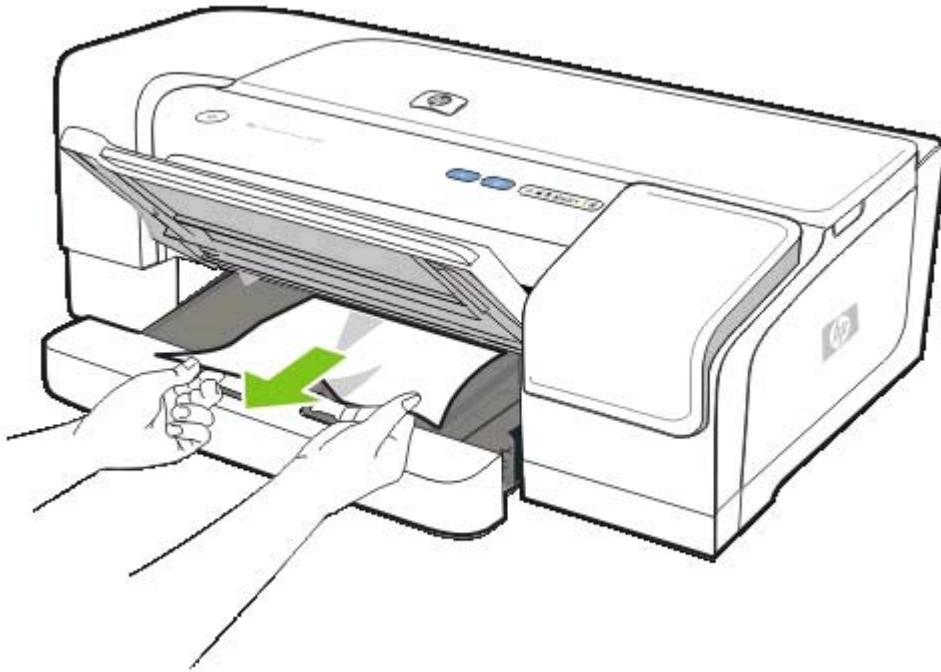


- d.** Reinsert the rear-access panel or the duplex unit into the printer.

**3.** If you cannot locate the jam, raise the output tray, and then check for a jam in the input tray. If media is jammed in the tray, do the following:

- a.** Extend the input tray.

- b. Pull the paper towards you.




- c. Ensure the media is properly aligned in the tray, and then lower the output tray.

4. If you have not found the jam, open the top cover. If there is paper remaining inside the printer, ensure the carriage has moved to the right of the printer, free any paper scraps or wrinkled media and pull the media towards you through the top of the printer.



**WARNING!** Do not reach into the printer when the printer is on and the carriage is stuck. When you open the top cover, the carriage should return to its position on the right side of the printer. If it does not move to the right, turn off the printer before you remove any jam.

5. After clearing the jam, close all covers, turn on the printer (if you turned it off), and then press  (Resume button) to continue printing.

The printer will continue printing the next page. You will need to resend any page that was jammed in the printer.

## To avoid jams

- Make sure the printer is placed on a flat surface.
- Make sure that nothing is blocking the paper path.
- Do not overload the tray. See [Understanding specifications for supported media](#).
- Load paper properly. See [Loading media](#).
- Do not use media that is curled or crumpled.



- Always use media that conforms with specifications. See [Selecting print media](#).
- If using recycled media, try another type of media. See [Selecting print media](#).
- Make sure the output tray is not overly full when you send a job to print.
- Make sure media is aligned against the right side of the tray.
- Make sure the paper guides are adjusted snugly against the media, but do not crinkle or bend it.



## 6 HP supplies and accessories

This section provides information on HP supplies and accessories for the printer. The information is subject to change; visit the HP website ([www.hpshopping.com](http://www.hpshopping.com)) for the latest updates. You can also make purchases through the website.

# Ordering printing supplies online

Besides the HP website, you may order printing supplies through the embedded Web server (EWS) or the Toolbox (Windows).

## System requirements for ordering printing supplies

To use the Toolbox, ensure you have the following:

- Internet access
- Printer connected to your computer using a USB or parallel cable, or connected to the network
- Toolbox installed on your computer (supported for Windows only)

To use the EWS, ensure you have the following:

- Printer connected to the network
- Web browser installed on your computer (either Microsoft Internet Explorer 5.5, Netscape 7.0, Opera 7.54, Mozilla Firefox 1.0, or Safari 1.2, or later)

## To order printing supplies

- **Toolbox (Windows)**

On the **Printer Status** tab, click **Order Supplies**. Your default Web browser starts and displays a website.

- **HP Printer Utility (Mac)**

Open **Information And Support**, click **Supplies Status**, and then click **Order HP Supplies**.

- **Embedded Web server**

In the **Other Links** section, click **Order Supplies**. Follow the instructions on the website to select and order printing supplies.

# Accessories

## Accessories and cables

HP automatic two-sided printing accessory (duplex unit)	C8258A
HP IEEE-1284 A-B Parallel Cable (2 meter)	C2950A
HP IEEE-1284 A-B Parallel Cable (3 meter)	C2951A
HP USB A-B (2 meter)	C6518A

## Print servers

HP Jetdirect 170X external print server	J3258B
HP Jetdirect 300X external print server	J3263A
HP Jetdirect 500x print server for Fast Ethernet	J3265A
HP Jetdirect 175X external print server (USB 1.0)	J6035C
HP Jetdirect en3700 Fast Ethernet external print server (USB 2.0)	J7942A
HP Jetdirect ew2400 external Fast Ethernet wired and wireless 802.11g print server for SMB	J7951A

# Supplies

## Ink supplies

### Ink cartridges

HP 10 Black	C4844A
HP 11 Cyan	C4836A
HP 11 Magenta	C4837A
HP 11 Yellow	C4838A
HP 13 Black	C4814A
HP 13 Cyan	C4815A
HP 13 Magenta	C4816A
HP 13 Yellow	C4817A

### Printheads

HP 11 Black	C4810A
HP 11 Cyan	C4811A
HP 11 Magenta	C4812A
HP 11 Yellow	C4813A

## 7 Support and warranty

The information in

# Obtaining electronic support

You can obtain support from HP from the following electronic sources:

- **Web**

Visit the Customer Care website on [hp.com](http://hp.com) for the latest software, product, operating system, and support information: [www.hp.com/support/officejetprok850](http://www.hp.com/support/officejetprok850).

- **Toolbox (Windows)**

The Toolbox provides easy, step-by-step solutions to common printing problems. See [Toolbox \(Windows\)](#).

- **HP Instant Support**

HP Instant Support is a suite of Web-based troubleshooting tools that help you quickly identify, diagnose, and resolve printing problems. See [HP Instant Support](#).



# Obtaining HP telephone support

During the warranty period, you may obtain assistance from HP Total Care.

## Before you call

To assist our HP Total Care Representatives to serve you better, prepare the following information before calling.

1. Print the printer configuration page. See [Understanding and printing the configuration page](#) for instructions on how to print this page. If the printer does not print, get the following information ready.
  - Model number and serial number. (Check the back of the printer.)
  - Printer model
2. Check the operating system that you are using, such as Windows 98 SE.
3. If the printer is connected to the network, check the network operating system, such as Windows NT Server 4.0.
4. Note how the printer is connected to your system, such as parallel, USB, or network.
5. Obtain the printer driver and version number of the printer software, such as HP Officejet Pro K850 Series Version: 62.43.12.0. (To find the printer driver version number, open the printer settings or properties dialog box and click the About tab.)
6. If you have a problem printing from a particular application, note the application and version number.

## HP Total Care phone numbers

In many locations, HP Total Care provides toll free telephone support during the warranty period. However, some of the support numbers listed below may not be toll free.

For the most current list of telephone support numbers, see [www.hp.com/support](http://www.hp.com/support).

Country/Region	Telephone number
Algeria	61 56 45 43
Argentina	Buenos Aires: 54-11-4708-1600 Outside Buenos Aires: 0-800-555-5000
Australia	1300 721 147 Out-of-warranty: 1902 910 910
Austria	<a href="http://www.hp.com/support">www.hp.com/support</a>
Bahrain	17212049
Belgium	Dutch: <a href="http://www.hp.com/support">www.hp.com/support</a> French: <a href="http://www.hp.com/support">www.hp.com/support</a>
Brazil	Outside Sao Paulo: 0-800-709-7751

Country/Region	Telephone number
	Greater Sao Paolo: (55)-11-4004-7751
Canada	Mississauga Area: (905) 206-4663 1-800-474-6836
Central America & The Caribbean	<a href="http://www.hp.com/support">www.hp.com/support</a>
Chile	800-360-999
China	021-3881 4518 800-810-3888
Colombia	Bogota: 571-606-9191 01-8000-51-4746-8368
Costa Rica	0-800-011-1046
Cyprus	800 9 2649
Czech Republic	810 222 222
Denmark	<a href="http://www.hp.com/support">www.hp.com/support</a>
Dominican Republic	1-800-711-2884
Ecuador	Andinatel: 1-999-119 • 800-711-2884 Pacifictel: 1-800-225-528 • 800-711-2884
Egypt	(02) 6910602
El Salvador	800-6160
Finland	<a href="http://www.hp.com/support">www.hp.com/support</a>
France	<a href="http://www.hp.com/support">www.hp.com/support</a>
Germany	<a href="http://www.hp.com/support">www.hp.com/support</a>
Greece	International: + 30 210 6073603 In-Country: 801 11 22 55 47
Guatemala	1-800-711-2884
Hong Kong S.A.R.	2802 4098
Hungary	1 382 1111
India	1 600 44 7737
Indonesia	+62 (21) 350 3408
Ireland	<a href="http://www.hp.com/support">www.hp.com/support</a>
Israel	(0) 9 830 4848
Italy	<a href="http://www.hp.com/support">www.hp.com/support</a>
Jamaica	1-800-711-2884
Japan	0570-000511 (Navi Dial, Japan Domestic Only) 03-3335-9800

Country/Region	Telephone number
Korea, Republic of	1588 3003
Luxembourg	<a href="http://www.hp.com/support">www.hp.com/support</a>
Malaysia	1800 88 8588
Mexico	Mexico City: 55-5258-9922 Outside Mexico City: 01-800-472-68368
Morocco	22 4047 47
Netherlands	<a href="http://www.hp.com/support">www.hp.com/support</a>
New Zealand	0800 441 147
Nigeria	1 3204 999
Norway	<a href="http://www.hp.com/support">www.hp.com/support</a>
Panama	1-800-711-2884
Paraguay	009 800 54 1 0006
Peru	0-800-10111
Philippines	2 867 3551
Poland	22 5666 000
Portugal	<a href="http://www.hp.com/support">www.hp.com/support</a>
Puerto Rico	1 877 232 0589
Romania	(21) 315 4442
Russia	Moscow: 095 777 3284 St. Petersburg: 812 332 4240
Saudi Arabia	800 897 1415
Singapore	6 272 5300
Slovakia	0850 111 256
South Africa	International: + 27 11 2589301 RSA: 086 0001030
Spain	<a href="http://www.hp.com/support">www.hp.com/support</a>
Sweden	<a href="http://www.hp.com/support">www.hp.com/support</a>
Switzerland	<a href="http://www.hp.com/support">www.hp.com/support</a>
Taiwan	02-8722-8000
Thailand	+66 (2) 353 9000
Trinidad & Tobago	1-800-711-2884
Tunisia	71 89 12 22
Turkey	90 216 444 71 71
Ukraine	(044) 230-51-06

Country/Region	Telephone number
United Arab Emirates (UAE)	600 54 47 47
United Kingdom	<a href="http://www.hp.com/support">www.hp.com/support</a>
United States	1-800-474-6836 (1-800 HP INVENT)
Uruguay	0004-054-177
Venezuela	Caracas: 58-212-278-8666 Outside of Caracas: 0-800-474-68368
Vietnam	+ 84 88234530
West Africa	+ 351 213 17 63 80

# Hewlett-Packard limited warranty statement

HP product	Duration of Limited Warranty
Software	1 year
Accessories	1 year
Ink cartridges	6 months*
Printheads	1 year*
Printer peripheral hardware (see below for details)	1 year
*For more detailed warranty information, see <a href="http://www.hp.com/support/inkjet_warranty">www.hp.com/support/inkjet_warranty</a> .	

## Extent of limited warranty

1. Hewlett-Packard warrants to the end-user customer that the HP products specified above will be free from defects in materials and workmanship for the duration specified above, which duration begins on the date of purchase by the customer.
2. For software products, HP's limited warranty applies only to a failure to execute programming instructions. HP does not warrant that the operation of any product will be uninterrupted or error free.
3. HP's limited warranty covers only those defects that arise as a result of normal use of the product, and does not cover any other problems, including those that arise as a result of:
  - a. Improper maintenance or modification;
  - b. Software, media, parts, or supplies not provided or supported by HP;
  - c. Operation outside the product's specifications;
  - d. Unauthorized modification or misuse.
4. For HP printer products, the use of a non-HP ink cartridge or a refilled ink cartridge does not affect either the warranty to the customer or any HP support contract with the customer. However, if printer failure or damage is attributable to the use of a non-HP or refilled ink cartridge, HP will charge its standard time and materials charges to service the printer for the particular failure or damage.
5. If HP receives, during the applicable warranty period, notice of a defect in any product which is covered by HP's warranty, HP shall either repair or replace the product, at HP's option.
6. If HP is unable to repair or replace, as applicable, a defective product which is covered by HP's warranty, HP shall, within a reasonable time after being notified of the defect, refund the purchase price for the product.
7. HP shall have no obligation to repair, replace, or refund until the customer returns the defective product to HP.
8. Any replacement product may be either new or like new, provided that it has functionality at least equal to that of the product being replaced.

9. HP products may contain remanufactured parts, components, or materials equivalent to new in performance.
- 10 HP's Limited Warranty Statement is valid in any country/region where the covered HP product is distributed by HP. Contracts for additional warranty services, such as on-site service, are available from any authorized HP service facility in countries/regions where the product is distributed by HP or by an authorized importer.

#### **Limitations of warranty**

TO THE EXTENT ALLOWED BY LOCAL LAW, NEITHER HP NOR ITS THIRD PARTY SUPPLIERS MAKES ANY OTHER WARRANTY OR CONDITION OF ANY KIND, WHETHER EXPRESS OR IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE.

#### **Limitations of liability**

1. To the extent allowed by local law, the remedies provided in this Warranty Statement are the customer's sole and exclusive remedies.
2. TO THE EXTENT ALLOWED BY LOCAL LAW, EXCEPT FOR THE OBLIGATIONS SPECIFICALLY SET FORTH IN THIS WARRANTY STATEMENT, IN NO EVENT SHALL HP OR ITS THIRD PARTY SUPPLIERS BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER BASED ON CONTRACT, TORT, OR ANY OTHER LEGAL THEORY AND WHETHER ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### **Local law**

1. This Warranty Statement gives the customer specific legal rights. The customer may also have other rights which vary from state to state in the United States, from province to province in Canada, and from country/region to country/region elsewhere in the world.
2. To the extent that this Warranty Statement is inconsistent with local law, this Warranty Statement shall be deemed modified to be consistent with such local law. Under such local law, certain disclaimers and limitations of this Warranty Statement may not apply to the customer. For example, some states in the United States, as well as some governments outside the United States (including provinces in Canada), may:
  - a. Preclude the disclaimers and limitations in this Warranty Statement from limiting the statutory rights of a customer (e.g. the United Kingdom);
  - b. Otherwise restrict the ability of a manufacturer to enforce such disclaimers or limitations; or
  - c. Grant the customer additional warranty rights, specify the duration of implied warranties which the manufacturer cannot disclaim, or allow limitations on the duration of implied warranties.
3. FOR CONSUMER TRANSACTIONS IN AUSTRALIA AND NEW ZEALAND, THE TERMS IN THIS WARRANTY STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT, OR MODIFY, AND ARE IN ADDITION TO, THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THE HP PRODUCTS TO SUCH CUSTOMERS.

#### **HP Inkjet Supplies - Warranty Quick Reference**



**NOTE** This information is intended to be an easy-to-read summary of the full HP warranty statement. To read the full warranty statement, go to [www.hp.com/support/inkjet\\_warranty](http://www.hp.com/support/inkjet_warranty) and select your supply.

### Is your product covered under warranty?

If you believe your ink supply or printhead is defective, you may return it for a refund or replacement provided that ALL of the following are true:

- Ink supply: It is not out of ink.
- Printhead: It has not exceeded its warranted usage:
  - Black printhead: 530 ml
  - Color printhead: 200 ml



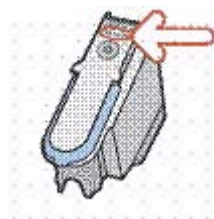
**NOTE** To determine the volume of ink that has passed through the printhead currently installed in your printer, see Accumulated ink usage (ml) in the Printhead Status section of the configuration page. See [Printing a configuration page](#).

- Ink supply: It has not been refilled, remanufactured, or otherwise tampered with.
- Printhead or ink supply: Its "end of warranty" date has not passed. Look at the illustration below to find the date location for your product.

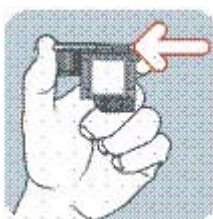
### End of warranty date locations

**Date format: YYYYMMDD**

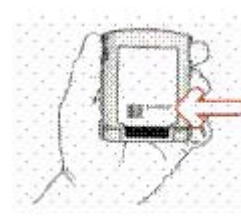
**Figure 1: New printheads**



**Figure 2: Older printheads**



**Figure 3: Ink supplies**



### Install-by date

Make sure to install your product before the install-by date printed on the supply package. Installing before or on the install-by date ensures that you will have at least the following before the end-of-warranty date:

- Printhead: one year (subject to accumulated ink usage limit)
- Ink supply: six months

### HP Inkjet supplies - expiration

As ink ages, it loses water. When ink is old enough, it can damage the printheads or other parts of the printing system. In normal use, most cartridges will run out of ink long before the ink is old enough to cause damage. However, to prevent any possibility of damage, HP printers that use the cartridges listed above are designed to stop printing with the cartridges before the ink gets too old.

See Expiration date (Y-M-D) located in the Ink Cartridge Status section of the configuration page.  
See [Printing a configuration page](#).

- Expiration has nothing to do with the product warranty. For information about the warranty on your ink cartridge, see [www.hp.com/support/inkjet\\_warranty](http://www.hp.com/support/inkjet_warranty).
- Expiration prevents damage from old ink. When ink cartridges expire, they stop working and must be replaced.

### **How do you return a product?**

There are two ways to return a product under warranty:

- Visit the retailer where you bought the product (subject to the retailer's return policy).
- If you cannot return the product to the retailer, call the support phone number listed on the product insert that came in the box with the product.



## 8 Printer lights reference

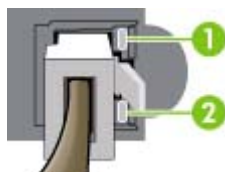
The printer lights indicate printer status and are useful for diagnosing printing problems. This section contains information about the printer lights, what they indicate, and what action to take if necessary.

### Control panel lights



- 1 Power button and light
- 2 Cancel button
- 3 Resume button and light
- 4 Paper Jam light
- 5 Door Open light
- 6 Out of Paper light
- 7 Color indicator lights
- 8 Printhead light
- 9 Ink Cartridge light










### Network connector lights (HP Officejet Pro K850dn Color Printer)



- 1 Link light
- 2 Activity light

## Interpreting control panel lights

This section briefly explains some of the messages that might appear on the printer lights display.

Printer light indication	Explanation and recommended action
<p>No lights are on.</p> 	<p>The printer is off.</p> <p>▲ Press  (Power button).</p>
<p>The Power light is on.</p> 	<p>The printer is ready.</p> <p>▲ No action is required.</p>
<p>The Power light blinks.</p> 	<p>The printer is turning on or off or processing a print job, or a print job has been cancelled.</p> <p>▲ No action is required.</p> <p>The printer is pausing for the ink to dry.</p> <p>▲ No action is required. Wait for the ink to dry.</p>
<p>The Power light is on and the Resume light blinks.</p> 	<p>The printer is in manual duplex mode. It is waiting for the ink to dry so the pages can be flipped over and reloaded.</p> <p>▲ Reload the stack into the printer and press  (Resume button).</p> <p>The printer has printed a banner, and the banner needs to be removed from the printer.</p> <p>▲ Press  (Resume button) to remove the banner from the printer.</p> <p>The width of the paper in the In tray does not match the width selected in the printer driver.</p> <p>▲ Reload paper of the required width in the In tray, and then press  (Resume button).</p> <p>The printer carriage has stalled.</p> <ul style="list-style-type: none"> <li>● Press  (Resume button) to continue printing.</li> <li>● If the error persists, turn the printer off, and then on again. See <a href="#">Troubleshooting</a>.</li> </ul>



## Printer light indication

## Explanation and recommended action

The Power light is on and the Resume light and Paper Jam light blink.




Print media is jammed in the printer.

- Press  (Resume button) to eject the jammed media.
- Remove all media from the output tray. Locate and clear the jam (see [Clearing jams](#)). After clearing the jam, press  (Resume button) to continue the print job.

The Power light is on and the Resume light and Out of Paper light blink.



The printer is out of paper.

- ▲ Load paper and then press  (Resume button).

The Power light and the Door Open light are on.



A cover is not closed completely.

- ▲ Make sure all covers are completely closed.

The Power light is on and the Door Open light blinks.



The rear-access panel or the automatic two-sided printing accessory (duplex unit) is not inserted completely.

- ▲ Make sure the rear-access panel or the duplex unit is inserted completely in the back of the printer.

The Power light is on, and the Door Open and Printhead lights are on.



The printhead latch is not secured.

- ▲ Open the top cover and press down firmly on the printhead latch to ensure that it is secured properly.

The Power light is on, and the Printhead light and one or more of the color indicator lights blink.



One or more of the printheads needs attention.

- Reinstall the appropriate printheads, close all covers, and then try to print.
- If the error persists, turn the printer off, and then on again.
- If the error persists, clean the printhead contacts (see [Maintaining the printheads](#)).
- If the error persists, replace the printhead or printheads indicated. See [HP supplies and accessories](#) for information about ordering supplies.

## Printer light indication

## Explanation and recommended action

The Power light, the Printhead light, and one or more of the color indicator lights are on.



One or more of the printheads is missing.

- Make sure that the protective tape on the printhead has been removed.
- Reinstall the printheads, close all covers, and then try to print.

The Power light is on and one or more of the color indicator lights is on.



An ink cartridge is low on ink and will need to be replaced soon.

- ▲ No action is required.

The Power light is on and one or more of the color indicator lights blinks.



An ink cartridge is out of ink and must be replaced before you can continue printing.

- ▲ Replace the ink cartridge indicated. See [HP supplies and accessories](#) for information about ordering supplies.

The Power light, the Ink Cartridge light, and one or more of the color indicator lights are on.



One or more of the ink cartridges is missing.

- Install the ink cartridges and try to print.
- If the error persists, replace the ink cartridge or cartridges indicated. See [HP supplies and accessories](#) for information about ordering supplies.

The Power light is on, and the Ink Cartridge light and one or more of the color indicator lights blink.



One or more of the ink cartridges is faulty or has expired.



- ▲ Replace the ink cartridge indicated. See [HP supplies and accessories](#) for information about ordering supplies.


The Power light and one or more of the color indicator lights are on, and the Ink Cartridge light blinks.



A non-HP ink cartridge is installed.




**CAUTION** Damage to the printer that results from modifying or refilling the ink cartridges, or from using non-HP ink cartridges, is not covered under the warranty.

- If you thought that this ink cartridge was an HP ink cartridge, return it to the place where you purchased it. Buy and install an HP ink cartridge.
- If you choose to use a non-HP ink cartridge, press and hold down  (Power button) and press  (Resume)

Printer light indication	Explanation and recommended action
<p>button) three times. All lights except the Power light go off. <i>Damage that results to the printer from using this cartridge is not covered under the warranty.</i></p>	
<p>The Power light blinks. All control panel lights are on.</p> 	<p>One or more printer errors have occurred.</p> <ul style="list-style-type: none"> <li>• Cancel all jobs from the printer queue.</li> <li>• Turn the printer off and wait for about 10 seconds before turning on the printer again. Try printing again.</li> <li>• If the problem persists, see <a href="#">Support and warranty</a>.</li> </ul>

## Interpreting network connector lights

This section briefly explains some of the patterns that might appear on the network connector lights.

Network connector light indication	Explanation and recommended action
<p>Link light is on. Activity light is off.</p> 	<p>The printer is connected to the network but is not receiving or transmitting data over the network. The printer is turned on and idle.</p> <p>▲ No action is required.</p>
<p>Link light is on. Activity light blinks.</p> 	<p>The printer is receiving or transmitting data over the network.</p> <p>▲ No action is required.</p>
<p>Link light is off. Activity light is off.</p> 	<p>The printer is turned off or is not connected to the network.</p> <p>▲ Turn on the printer. If the printer is already turned on and a network cable is connected, see <a href="#">Troubleshooting</a>.</p>



## 9 Printer specifications

This section provides information on physical, system, and functional specifications for the printer.

# Physical specifications

For media and media-handling specifications, see [Selecting print media](#).

Available models and physical dimensions	Size (width by depth by height)	610 by 376.8 by 205 mm (24 by 14.8 by 8.1 inches)
		▲ With duplex unit: 610 by 524.8 by 205 mm (24 by 20.6 by 8.1 inches)
	Weight (does not include printheads or ink cartridges)	12.3 kg (27.1 lbs)
		▲ With duplex unit: 14.3 kg (35.1 lbs)



# Product features and capacities

For media and media-handling specifications, see [Selecting print media](#).

<b>Connectivity</b>		<ul style="list-style-type: none"> <li>IEEE 1284-compliant bidirectional parallel (all models)</li> <li>USB 2.0-compliant full speed (all models)</li> <li>Embedded 10/100BT (included with HP Officejet Pro K850dn Color Printer)</li> </ul>
<b>Print method</b>		Drop-on-demand thermal inkjet printing
<b>Ink cartridges</b>		4 ink cartridges (1 each for black, cyan, magenta, and yellow)
<b>Printheads</b>		4 printheads (1 each for black, cyan, magenta, and yellow)
<b>Supply yields (based on 5% coverage)</b>	Ink cartridges	1,750 pages
	Printheads	<ul style="list-style-type: none"> <li>Black: 16,000 pages</li> <li>Cyan, magenta, and yellow: 24,000 pages</li> </ul>
<b>Color calibration</b>		<ul style="list-style-type: none"> <li>ColorSync</li> <li>ICC Profiles</li> </ul>
<b>Device languages</b>		▲ HP PCL 3 GUI
<b>Font support</b>		<ul style="list-style-type: none"> <li>US fonts: CG Times, CG Times Italic, Universe, Universe Italic, Courier, Courier Italic, Letter Gothic, Letter Gothic Italic</li> <li>Built-in support for Arabic and Hebrew symbol sets</li> </ul>
<b>Duty cycle</b>		Up to 6,250 pages per month

## Processor and memory specifications

For media and media-handling specifications, see [Selecting print media](#).

<b>Device processor</b>	▲ Motorola 32-bit ColdFire 4e RISC (256 MHz)
<b>Device memory</b>	<ul style="list-style-type: none"><li>● 32 MB built-in RAM</li><li>● 4 MB built-in Flash ROM</li></ul>

# Operating system and network protocol specifications

For media and media-handling specifications, see [Selecting print media](#).

<b>Operating system compatibility</b>	<ul style="list-style-type: none"><li>• Windows 98, Windows Me, Windows NT 4.0, Windows 2000, Windows XP</li><li>• Mac OS X v10.2, v10.3, and v10.4</li></ul>
<b>System requirements (Minimum)</b>  <b>Note:</b> Graphic-intensive, complex, and large files might require more hard disk space.	<ul style="list-style-type: none"><li>• <b>Windows 98:</b> Pentium 90 MHz, 16 MB RAM, 60 MB hard disk space</li><li>• <b>Windows NT 4.0*:</b> Pentium 100 MHz, 32 MB RAM, 60 MB hard disk space</li><li>• <b>Windows Me:</b> Pentium 150 MHz, 32 MB RAM, 60 MB hard disk space</li><li>• <b>Windows 2000:</b> Pentium 300 MHz, 64 MB RAM, 110 MB hard disk space</li><li>• <b>Windows XP, 32 bit:</b> Pentium 300 MHz, 64 MB RAM, 110 MB hard disk space</li><li>• <b>Windows XP Professional x64 edition:</b> Pentium 1.8 GHz, 256 MB RAM, 100 MB free hard disk space</li><li>• <b>Windows 2003 Server:</b> Pentium 550 MHz, 128 MB RAM, 110 MB free hard disk space</li><li>• To view the online User Guide (Windows), you must be running Internet Explorer 5.0 or later.</li><li>• <b>Mac OS X v10.2, v10.3, and v10.4:</b> 333 MHz, 128 MB RAM, 100 MB hard disk space</li></ul> <p>* Printer drivers can be installed from the Starter CD using the Add Printer utility in Windows.</p>
<b>System requirements (Recommended)</b>  <b>Note:</b> Graphic-intensive, complex, and large files might require more hard disk space.	<ul style="list-style-type: none"><li>• <b>Windows 98 and Windows Me:</b> Pentium® 266 MHz, 32 MB RAM, 100 MB free hard disk space</li><li>• <b>Windows NT 4.0*:</b> Pentium® 266 MHz, 64 MB RAM, 100 MB free hard disk space</li><li>• <b>Windows 2000:</b> Pentium 300 MHz, Windows 2000: 128 MB RAM, 150 MB hard disk space</li></ul>

- 
- **Windows XP 32-bit:** Pentium 300 MHz, 128 MB RAM, 150 MB hard disk space
  - **Windows XP Professional x64 Edition:** Pentium 1.8 GHz, 512 MB RAM, 150 MB free hard disk space
  - **Windows 2003 Server:** Pentium 550 MHz, 256 MB RAM, 150 MB free hard disk space
  - **Mac OS X v10.2, v10.3, and v10.4:** 333 MHz, 256 MB RAM, 200 MB hard disk space

\* Printer drivers can be installed from the Starter CD using the Add Printer utility in Windows.

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#### Network operating system compatibility\*

\* Contact your network operating system vendor for software, documentation, and support.

- Windows 98, Windows Me, Windows NT 4.0, Windows 2000, Windows XP 32-bit (Professional and Home Editions)
  - Mac OS X v10.2, v10.3, and v10.4
  - RedHat Linux 9.0 and higher
  - SuSE Linux 8.1 and higher
  - Debian 3.0 and higher
  - Slackware 8.1 and higher
  - Lindows 1.3 and higher
  - Microsoft Windows Terminal Server Edition 4.0
  - Microsoft Windows Server 2003 Terminal Services (formerly known as Microsoft Windows XP Server Terminal Services)
  - Microsoft Windows 2000 Server Terminal Services with Citrix MetaFrame 1.8
  - Microsoft Windows Server 2003 Terminal Services with Citrix MetaFrame 1.8
  - Microsoft Windows NT and Windows 2000 Server Terminal Services with Citrix V1.8
  - Microsoft Windows NT and Windows 2000 Server Terminal Services with Citrix XP
  - Microsoft Windows 2000 Server Terminal Services
-

<b>Compatible network protocols</b>		<ul style="list-style-type: none"> <li>• TCP/IP</li> <li>• SLP</li> <li>• DHCP</li> <li>• SNMP</li> <li>• HTTP</li> </ul> <p>Not all protocol and operating system combinations are supported. For more information, see <a href="http://www.hp.com">www.hp.com</a> and <a href="http://www.hp.com/support/officejetprok850">www.hp.com/support/officejetprok850</a>.</p>
<b>Network management</b>	HP Web Jetadmin plug-ins	
	Embedded Web server	<p><b>Features</b></p> <ul style="list-style-type: none"> <li>• Ability to remotely configure and manage network devices</li> <li>• HP myPrintMileage</li> </ul> <p><b>System requirements</b></p> <ul style="list-style-type: none"> <li>• TCP/IP-based network</li> <li>• A Web browser (either Microsoft Internet Explorer 5.5, Netscape 7.0, Opera 7.54, Mozilla Firefox 1.0, or Safari 1.2, or later)</li> <li>• Network connection. (You cannot use the embedded Web server when the printer is connected directly to a computer.)</li> <li>• Internet connection (for some features). You can open and use the embedded Web server without being connected to the Internet. However, some features will not be available.</li> <li>• Must be on the same side of a firewall as the printer</li> </ul>

## Functional specifications

For media and media-handling specifications, see [Selecting print media](#).

---

**Speed (U.S. Letter and A4)****DRAFT mode:**

- Black text: 24 pages per minute (ppm)
- Mixed text with color graphics: 21 ppm

**FAST NORMAL mode:**

- Black text: 12.5 ppm
- Mixed text with color graphics: 12 ppm

**NORMAL mode:**

- Black text: 6.5 ppm
- Mixed text with color graphics: 5 ppm

**BEST mode:**

- Black text: 4 ppm
- Mixed text with color graphics: 4 ppm

**Laser-quality speed\*:**

- Black text: 7 ppm
- Mixed text with color graphics: 5.5 ppm

\*The "laser-quality speed" comparison has the page-per-minute speeds of the HP Officejet Pro K850 Color printer against the benchmark of the HP Color LaserJet 4600 at comparable print quality. This comparison is based solely on HP's internal testing.

---

**Resolution****Black:**

- ▲ Up to 1,200 by 600 dpi with pigmented black ink

**Color:**

- ▲ HP enhanced Color Layering Technology with PhotoREt III for photo quality (up to 4,800 by 1,200-optimized dpi on HP premium photo papers, 1,200 by 1,200-input dpi)
-

## Environmental specifications

For media and media-handling specifications, see [Selecting print media](#).

<b>Operating environment</b>	Operating temperature	5° to 40° C (41° to 104° F)
	Recommended operating conditions	15° to 35° C (59° to 95° F)
	Recommended relative humidity	20 to 80 percent noncondensing
<b>Storage environment</b>	Storage temperature	-40° to 70° C (-40° to 158° F)
	Storage relative humidity	Up to 90 percent noncondensing at a temperature of 65° C (149° F)



# Electrical specifications

For media and media-handling specifications, see [Selecting print media](#).

<b>Power supply</b>	External universal power adapter
<b>Power requirements</b>	<ul style="list-style-type: none"><li>• Input voltage: 100 to 240 VAC (+/- 10 percent), 50/60 Hz (+/-3Hz)</li><li>• Output voltage: 32 Vdc, 2500 mA</li></ul>
<b>Maximum allowable power consumption</b>	<ul style="list-style-type: none"><li>• Printing: 65 watts</li><li>• Standby mode: less than 45 watts</li><li>• Off mode: less than 1 watt</li></ul>
<b>Acoustic emission specifications (print in Draft mode, noise levels per ISO 7779)</b>	
Sound pressure (bystander position)	LpAm 54 (dBA)
Sound power	LwAm 61 (BA)



# 10 Regulatory information

This section provides regulatory information for the printer.

## FCC statement

The United States Federal Communications Commission (in 47 cfr 15.105) has specified that the following notices be brought to the attention of users of this product.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### Shielded cables

Use of a shielded data cable is required to comply with the Class B limits of Part 15 of the FCC Rules.

**Pursuant to Part 15.21 of the FCC Rules, any changes or modifications to this equipment not expressly approved by the Hewlett-Packard Company, may cause harmful interference and void the FCC authorization to operate this equipment.**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## EMI statement (Korea)

사용자 안내문 (B 급기기)

이 기기는 비업무용으로 전자파 잠해검정을 받은 기기로서, 주거지역에서는 물론 모든 지역에서 사용할 수 있습니다.

## VCCI statement (Japan)

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると受信障害を引き起こすことがあります。

取り扱い説明書に従って正しい取り扱いをして下さい。

## Regulatory model number

For regulatory identification purposes, your product is assigned a Regulatory Model Number. The Regulatory Model Number for your product is **SNPRC-0504**. The regulatory number should not be confused with the product name (HP Officejet Pro K850/K850dn Color Printer) or product number (C8177A and C8178A).

## Power cord statement

The power cord cannot be repaired. If it is defective, it should be discarded or returned to the supplier.

製品には、同梱された電源コードをお使い下さい。  
同梱された電源コードは、他の製品では使用出来ません。



# Declaration of conformity

Manufacturer's Name:	Hewlett-Packard Singapore (Pte) Ltd
Manufacturer's Address:	Imaging and Printing Manufacturing Operations Singapore 60 Alexandra Terrace, #07-01, The Comtech, Singapore 118502
declares, that the product	
Product Name:	HP Officejet Pro K850/K850dn Color Printer
Product Number:	C8177A and C8178A
Regulatory Model Number <sup>(1)</sup> :	SNPRC-0504
Product Accessory Number:	C8258A / HP Automatic two-sided printing accessory
Product Options:	All
Conforms to the following Product Specifications:	
Safety:	IEC 60950:1999 / EN 60950:2000EN 60825-1:1994+A1:2002
EMC:	CISPR 22:1997 / EN 55022:1998 Class B <sup>(2)(3)</sup> CISPR 24:1997 + A1 / EN 55024:1998 + A1  IEC 61000-3-2:2000 / EN 61000-3-2:2000 IEC 61000-3-3:1994 +A1 / EN 61000-3-3:1995 + A1  FCC Title 47 CFR, Part 15 Class B / VCCI-2 <sup>(2)</sup> ICES-003 Issue 4
Supplementary Information:	
The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC, and carries the CE marking accordingly.	
(1) This product is assigned a Regulatory model number that stays with the regulatory aspects of the design. The Regulatory Model Number is the main product identifier in the regulatory documentation and test reports, this number should not be confused with the marketing name or the product numbers.	
(2) The product was tested in a typical configuration with Hewlett Packard personal computer systems.	
(3) Excepting clause 9.5 which was not applied.	
Singapore, 16 August 2004	Chan Kum Yew  Director, Quality
<b>Local Contact for regulatory topics only:</b>	
<b>European Contact:</b> Hewlett-Packard GmbH, HQ-TRE, Herrenberger Strasse 140, 71034 Boeblingen, Germany	
<b>USA Contact:</b> Hewlett-Packard Company, HPCC, 20555 S.H. 249 Houston, Texas, 77070	
<b>Australia Contact:</b> Hewlett Packard Australia Ltd, Product Regulations Manager, 31-41 Joseph Street, Blackburn, Victoria 3130, Australia.	

# Environmental sustainability program

Hewlett-Packard is committed to providing quality products in an environmentally sound manner. HP continuously improves the design processes of its products to minimize the negative impact on the office environment and on the communities where products are manufactured, shipped, and used. HP has also developed processes to minimize the negative impact of the disposal of the product at the end of its printing life.

For more information about the HP environmental sustainability program, see [www.hp.com/hpinfo/globalcitizenship/environment/index.html](http://www.hp.com/hpinfo/globalcitizenship/environment/index.html).

## Reduction and elimination

### Paper use

The two-sided (duplex) printing and N-up printing features of this product (which you can use to print multiple pages of a document on one sheet of paper) can reduce paper usage and the resulting demands on natural resources. For more information about using these features, see this guide.

### Ink use

The Draft mode of this product uses less ink, which might extend the life of the cartridges. For more information, see the printer driver onscreen Help.

### Ozone-depleting chemicals

Ozone-depleting chemicals, such as chlorofluorocarbons (CFCs), have been eliminated from HP manufacturing processes.

## Power consumption

This product qualifies for ENERGY STAR® (version 3.0), which is a voluntary program to encourage the development of energy-efficient office products.



ENERGY STAR® and the ENERGY STAR mark are U.S. registered marks. As an ENERGY STAR® Partner, Hewlett-Packard Company has determined this product meets ENERGY STAR® guidelines for energy efficiency. For more information, see [www.energystar.gov](http://www.energystar.gov).

## Material safety data sheets

Material safety data sheets (MSDSs) can be obtained from the following HP website: [www.hp.com/go/msds](http://www.hp.com/go/msds).

## Recycling

Design for recycling has been incorporated into this product:

- The number of materials has been kept to a minimum while ensuring proper functionality and reliability.
- Dissimilar materials have been designed to separate easily.
- Fasteners and other connections are easy to locate, gain access to, and remove by using common tools.
- High-priority parts have been designed so that you can reach them quickly for efficient disassembly and repair.

## Product packaging

The packaging materials for this product have been selected to provide maximum protection for the least cost possible, while attempting to minimize environmental impact and facilitate recycling. The rugged design of the product assists in minimizing both packaging materials and damage rates.

## Plastics

Plastic parts over 25 grams are marked according to international standards that enhance the ability to identify plastics for recycling purposes at the end of the product's life.

## Disposal of waste equipment by users in private households in the European Union



This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

## HP products and supplies

HP's Planet Partners™ recycling service provides an easy way to recycle any brand of computer equipment or HP printing supplies. HP's state-of-the-art processes ensure that your unwanted hardware or HP printing supply is recycled in a way that conserves resources. For more information, see [www.hp.com/recycle](http://www.hp.com/recycle).



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